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EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1975

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
P.O. Box 17107
Denver, CO 80217

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

Snow Courses	Current Information			Past Record Water Content in Inches		
	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1 1958-72 Average	Jan. 1 Last Year	Feb. 1 1958-72 Average
Berthoud Summit	1/02	30	7.5	7.8	7.7	11.4
Cameron Pass	12/30	38	10.7	---	11.0	16.5
Columbine Lodge	12/31	40	10.5	8.6	8.7	14.3
Fremont Pass	1/03	28	5.9	6.0	4.2	9.8
Joe Wright	12/30	41	10.3	---	9.8	---
Mesa Lakes	12/27	29	6.4	7.4	3.8	10.5
Porphyry Creek	12/30	38	8.2	7.1	6.0	10.0
Rabbit Ears	12/31	52	12.8	11.9	9.5	16.1
Red Mountain	12/30	55	13.8	13.6	11.5	19.0
Spud Mountain	12/30	41	11.8	10.5	6.9	15.2
Tennessee Pass	1/03	21	3.6	4.3	1.9	6.5
Two Mile	12/30	24	5.4	6.3	6.3	8.6
University Camp	12/30	27	5.6	6.8	8.5	10.9
Upper San Juan	12/30	48	11.4	14.2	7.6	19.1
Vail Pass	1/02	26	6.1	6.4	5.3	10.4
Wolf Creek Pass	12/30	45	9.4	13.5	6.4	17.4
Wolf Creek Summit	12/30	45	10.5	14.5	7.2	18.5

The early season snow readings indicate near normal snowpack over Colorado. Only a limited number of snow courses are read January 1st. Low elevation snow in the Rio Grande and San Juan basins is good while high elevation snow is below normal. Snow in the central zone of the state is very near normal as is the northern section.

Reservoir storage was slightly depleted last year due to the dry summer. It is important that we have good snowpack to insure adequate water next summer.

Full scale snow measurements will be taken February 1st.

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AT URBANA-CHAMPAIGN

January 1, 1975

ADDITIONAL SNOW COURSE MEASUREMENTS

Snow Survey Unit
Soil Conservation Service
P.O. Box 17107
Denver, CO 80217

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

Snow Courses	Current Information			Past Record Water Content (Inches)	
	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1, 1974	Feb. 1 1958-72 Average
Cascade	12/30	26	5.0	5.2	8.0
Hiway	12/30	35	8.0	5.1	15.6
Ironton Park	12/30	34	7.9	7.4	8.0
Lemon #1	12/31	22	4.8	1.9	6.0
Lemon #2	12/31	28	6.1	2.4	---
Lizard Head	12/30	32	6.7	7.2	10.4
Love Lake	12/30	26	4.0	1.6	4.9
Mineral Creek	12/30	33	7.5	5.3	9.9
Molas Lake	12/30	26	5.9	5.3	8.7
Pass Creek	12/30	23	3.3	3.3	8.2
Pool Table	12/30	18	2.3	1.2	5.2
Purgatory	12/30	40	9.5	6.1	15.4
Rico	12/30	16	3.4	3.4	5.6
Santa Maria	NS			1.6	3.3
Silverton	12/30	22	4.4	4.5	5.6
Telluride	12/30	24	4.6	3.6	4.7
Trout Lake	12/30	32	6.6	6.3	8.1
Upper Rio Grande	12/30	27	5.7	2.3	5.8
Lapland	12/30	16	3.7	---	6.6
Bateman (NM)	12/31	22	3.5	2.5	---
La Cueva (NM)	12/27	13	2.4	1.8	---
Sandoval (NM)	12/30	11	2.0	0.0	3.5

NS-No Survey

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

UNIVERSITY OF THE
MAR 3 1975
UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
FEB. 1, 1975

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Cabins near Sacajawea Snow Course in Bridger Mountains, Montana.
SCS PHOTO [illegible]-P480-15

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broodway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA SCS PORTLAND OREG 1974

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C

Released by

M. D. BURDICK
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

MARION E. STRONG
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN
DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS
STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER
STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
and
RONALD E. MORELAND, Assistant Snow Survey Supervisor

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer Caunty Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorada, Turkey Creek, Puebla, Bessemer, Olney Baone, Cheyenne, Upper Huerfana, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prawers, Prowers, Kiowa County, West Otero, East Otera, and Big Sandy Soil Conservatian Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

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WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

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WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

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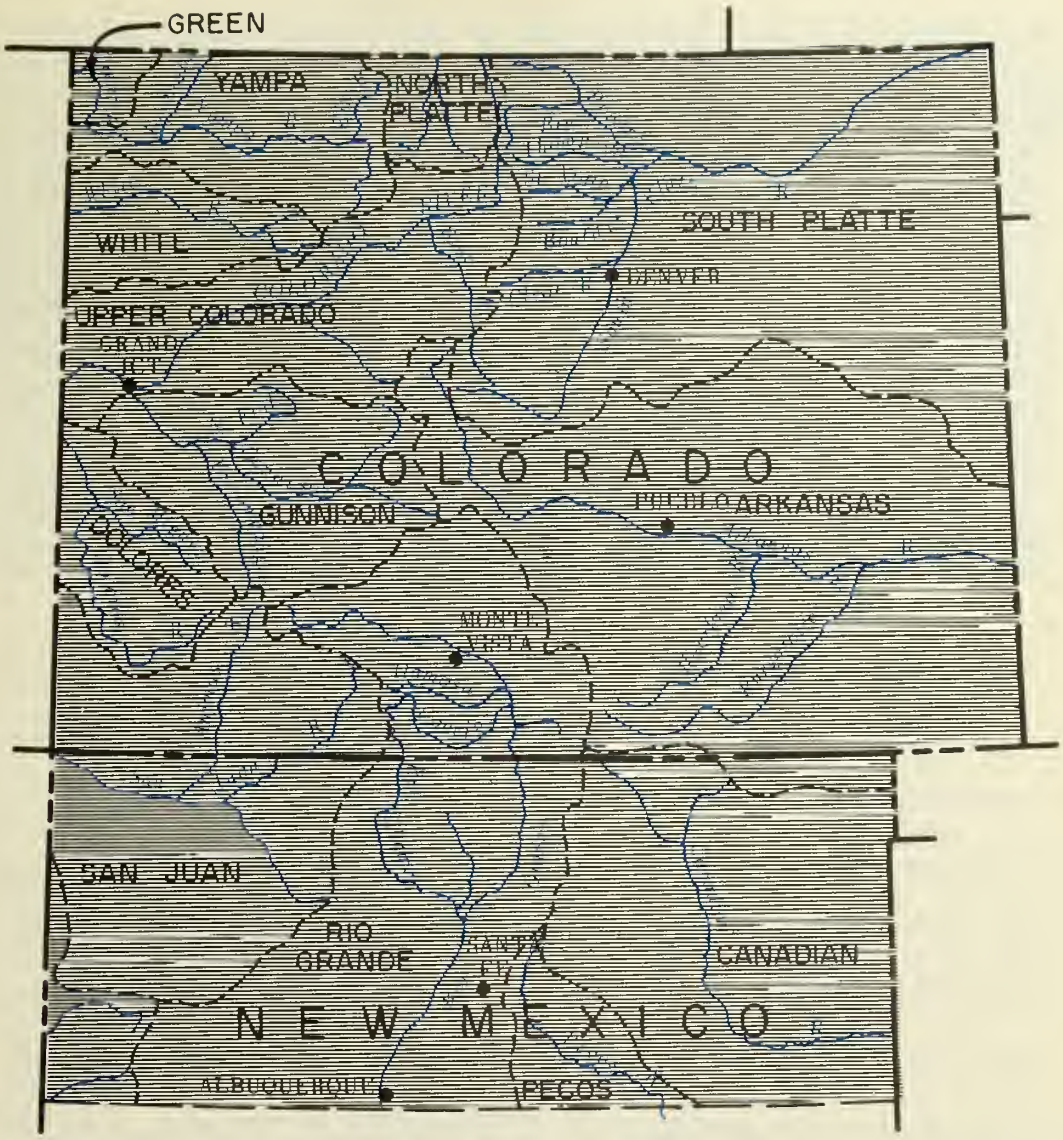
WATER SUPPLY OUTLOOK

as of

FEBRUARY 1, 1975



GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
FEBRUARY 1, 1975

THE 1975 SNOWPACK IS NEAR THE 1958-72 AVERAGE IN BOTH STATES. THE WINTER STARTED SLOW BUT THE LAST TWO WEEKS OF JANUARY HAVE ADDED MUCH NEEDED SNOW. IRRIGATED VALLEYS ARE GENERALLY DRY. LITTLE SNOW HAS FALLEN IN THE VALLEYS. DUE TO THE DRY SUMMER AND FALL, RESERVOIR STORAGE WAS DEPLETED. STORAGE IS DOWN FROM LAST YEAR. ADDITIONAL SNOW IS NEEDED IN BOTH STATES TO INSURE ADEQUATE WATER NEXT YEAR.

COLORADO -- COLORADO HAS AN UNUSUALLY EVEN SNOWPACK FROM BORDER TO BORDER. NOWHERE DOES THE SNOWPACK INDICATE MUCH ABOVE OR BELOW NORMAL. ABOUT 50% OF OUR WINTER HAS PASSED, SO THERE IS STILL TIME TO IMPROVE THE OUTLOOK. THIS IS ONE OF THE DRIEST OF FALLS AND WINTERS THE PLAINS AREA HAS EXPERIENCED. HARDLY ANY SNOW HAS FALLEN ON THE IRRIGATED AND DRY LANDS OF THE EASTERN SLOPE. RESERVOIR STORAGE IS CONSIDERABLY LESS THAN LAST YEAR, BUT NEAR NORMAL EXCEPT IN THE ARKANSAS AND RIO GRANDE DRAINAGES. HERE STORAGE IS MUCH DEPLETED. MORE SNOW IS NEEDED.

NEW MEXICO -- SNOWPACK VARIES FROM A HIGH OF 150% ON THE PECOS TO 50% ON RED RIVER, HOWEVER, THESE AVERAGES ARE BASED ON ONLY LIMITED INFORMATION. GENERALLY THE REST OF THE STATE HAS NEAR AVERAGE SNOWFALL. THE MAINSTEM OF THE RIO GRANDE HAS ABOUT 107% OF NORMAL AND IS ALMOST IDENTICAL TO LAST YEAR. SOIL MOISTURE IN THE STATE IS LISTED AS FAIR TO POOR. CARRYOVER STORAGE WAS DEPLETED IN 1974 AND IS NOW JUST NORMAL. CONSIDERABLY MORE SNOW IS NEEDED IN THE MOUNTAINS.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

FEBRUARY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

SNOWPACK ON THE SOUTH PLATTE WATERSHED IS NEARLY NORMAL. THE BEST SNOWPACK ON THE DRAINAGE IS ON THE HEADWATERS. THE NORTHERN TRIBUTARIES ARE SLIGHTLY BELOW NORMAL. SOIL MOISTURE IN THE MOUNTAINS IS POOR AND EXTREMELY POOR IN THE IRRIGATED AREAS. RESERVOIR STORAGE IS DOWN FROM LAST YEAR BUT STILL SLIGHTLY ABOVE AVERAGE. MORE SNOW IS NEEDED TO INSURE ADEQUATE WATER THIS SUMMER.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A. MOSS – AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

RODNEY M. ALT – AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average †
No numerical forecasts issued until March 1, 1975.			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Avg.	Avg.
Coal Creek	Avg.	Avg.
Deer Creek	Avg.	Avg.
North Fork of South Platte	Avg.	Avg.
North Fork of Cache La Poudre	Avg.	Avg.
Ralston Creek	Avg.	Avg.
Rock Creek	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (1) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	77	95
Boulder	3	83	97
Cache La Poudre	7	72	98
Clear Creek	6	95	110
Saint Vrain	2	106	108
South Platte	2	126	121

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	3	105	78
Boulder	1	100	82
Cache La Poudre	2	81	81
Clear Creek	2	82	80
Saint Vrain	3	87	81
South Platte	2	75	80

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33.0	15.9	15.9	13.8
Barr Lake	32.2	25.4	24.1	20.9
Black Hollow	8.0	4.6	4.5	3.8
Boyd Lake	44.0	37.0	45.8	37.2
Cache La Poudre	9.5	6.6	7.2	7.6
Carter Lake	108.9	86.5	82.9	77.3
Chambers Lake	8.8	2.9	3.1	2.9
Cheeseman	79.0	41.0	52.5	56.1
Cobb Lake	34.3	16.7	19.2	15.1
Eleven Mile	97.8	96.5	97.8	87.2
Fossil Creek	11.6	6.9	7.4	6.8
Gross	43.1	21.9	28.6	28.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Halligan	6.4	3.7	5.8	3.3
Horsetooth	143.5	81.5	106.6	85.5
Lake Loveland	14.3	10.0	10.1	8.8
Lone Tree	9.2	5.3	8.3	6.4
Mariano	5.4	5.3	5.0	4.8
Marshall	10.3	6.2	---	3.7
Marston	18.0	16.1	15.9	14.4
Milton	24.4	15.2	15.0	12.6
Standley	42.0	27.3	33.8	15.2
Terry Lake	8.2	5.7	5.1	4.7
Union	12.7	12.0	12.7	9.9
Windsor	18.6	9.7	10.2	10.1

† 1958-1972 period.

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UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
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P.O. BOX 17107
DENVER, COLORADO 80217

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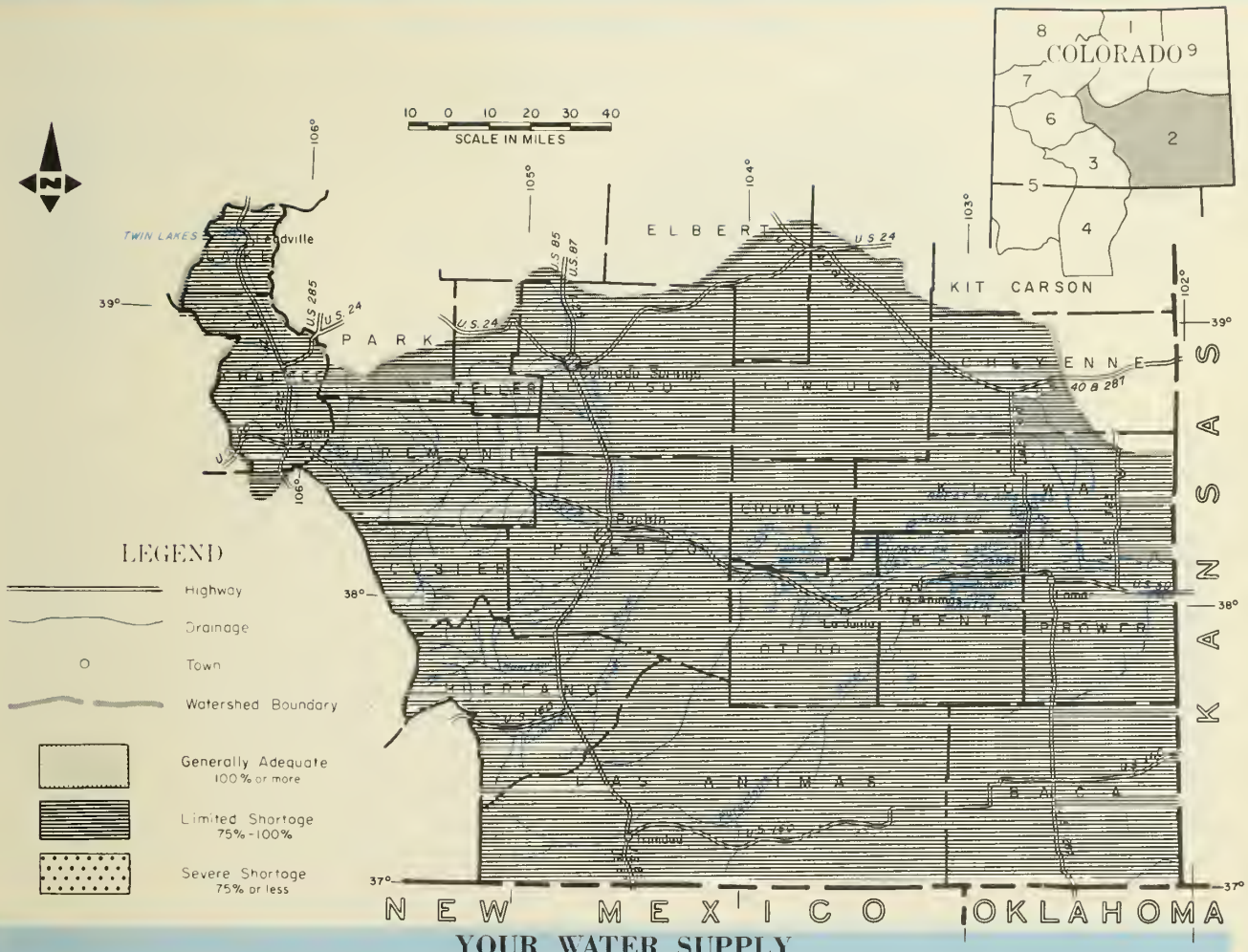
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO
as of

FEBRUARY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK IN THE ARKANSAS BASIN IS GOOD. IT VARIES FROM 111% OF NORMAL ON THE PURGATORIE TO 118% ON THE CUCHARAS. CARRYOVER STORAGE WAS NEARLY DEPLETED IN THE BASIN LAST YEAR, SO CONSIDERABLE SNOW IS NEEDED. CURRENT STORAGE IS ONLY 26% OF NORMAL AND 38% OF LAST YEAR. VALLEY SOILS ARE IN POOR CONDITION. SNOW IN THE IRRIGATED AREAS IS NEEDED. THERE IS CONSIDERABLE TIME LEFT TO THE SNOW SEASON TO IMPROVE THE OUTLOOK.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A. MOSS - AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

D. W. GILLASPIE - AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1975.			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Exc.	Avg.
Fountain Creek	Exc.	Avg.
Grape Creek	Exc.	Avg.
Hardscrabble Creek	Exc.	Avg.
Huerfano	Exc.	Avg.
Monument Creek	Exc.	Avg.

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	7	103	116
Cucharas	2	62	118
Purgatoire	1	106	---

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	73	82
Cucharas and Purgatoire	1	80	67

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe Creek	61.6	0.0	0.0	17.0
Clear Creek	11.4	2.5	4.0	8.1
Cucharas	40.0	0.0	5.4	2.8
Great Plains	150.0	0.0	26.1	49.3
Horse Creek	26.9	0.0	0.0	6.2

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	4.0	14.0	85.0
Meredith	41.9	0.0	19.5	9.5
Model	15.0	0.0	0.4	3.0
Turquoise	130.0	38.6	59.5	---
Twin Lakes	57.9	18.0	35.0	25.6

+ 1958-1972 period.

Return if not delivered
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SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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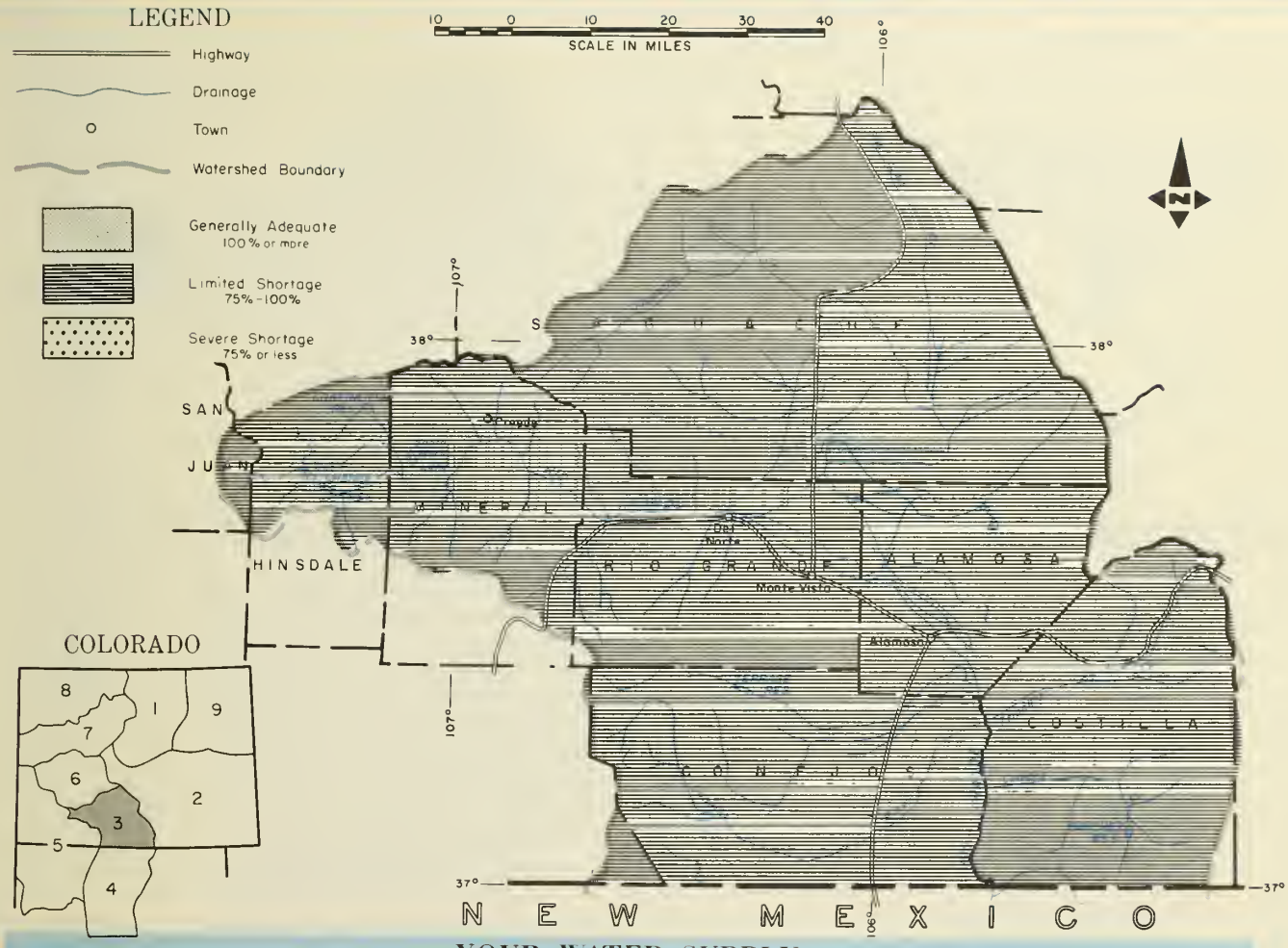
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of
FEBRUARY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

CURRENT SNOWPACK ON THE RIO GRANDE DRAINAGE IS NEAR NORMAL EXCEPT FOR CONEJOS RIVER WHICH HAS ONLY 76% OF THE 15 YEAR AVERAGE. VALLEY SOILS ARE DRY. A GOOD SNOW IS BADLY NEEDED. MOUNTAIN SOILS ARE ALSO IN POOR CONDITION. CARRYOVER STORAGE IS 72% OF THE 1958-72 PERIOD AND ONLY 40% OF LAST YEAR. CONSIDERABLY MORE SNOW IS NEEDED TO INSURE ADEQUATE WATER THIS SUMMER.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

D. W. GILLASPIE - AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average †
No numerical forecasts issued until March 1, 1975.			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Fair	Fair
Sangre de Cristo Creek	Fair	Fair
Trinchera Creek	Fair	Fair

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Alamosa	2	69	87
Conejos	3	65	76
Culebra	2	77	108
Rio Grande	9	102	107

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Alamosa	1	109	63
Conejos	1	114	100
Culebra	1	80	67
Rio Grande	2	87	66

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Continental	26.7	1.9	1.4	4.7
Platoro	60.0	18.9	35.4	8.6
Rio Grande	45.8	5.3	28.7	19.2

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Sanchez	103.2	4.4	19.5	13.3
Santa Maria	45.0	3.5	7.6	5.9
Terrace	17.7	7.3	8.8	5.3

† 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO
as of
FEBRUARY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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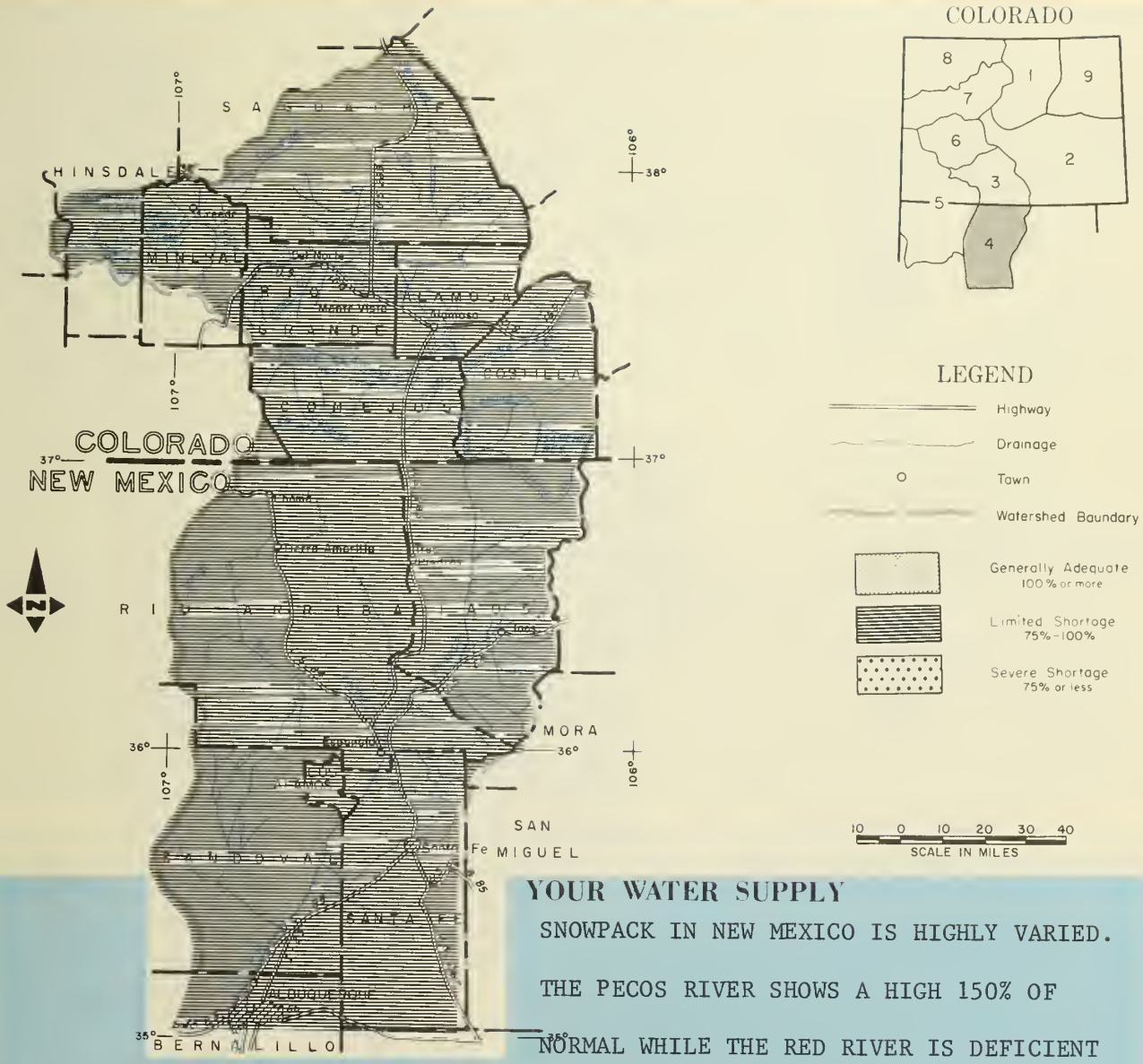

YOUR WATER SUPPLY

SNOWPACK IN NEW MEXICO IS HIGHLY VARIED. THE PECOS RIVER SHOWS A HIGH 150% OF NORMAL WHILE THE RED RIVER IS DEFICIENT WITH ONLY 51%. IT IS EARLY IN THE SEASON AND TIME REMAINS TO CHANGE THE SNOW PATTERN. SOIL MOISTURE IN THE IRRIGATED AREAS IS REPORTED AS FAIR TO GOOD. CARRYOVER STORAGE IS DOWN FROM LAST YEAR BUT STILL NEARLY NORMAL.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

MARION E. STRONG – STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

JAMES E. TATUM - AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average †
No numerical forecasts issued until March 1, 1975.			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo	Avg.	Avg.
Jemez River	Avg.	Avg.
Mora River	Avg.	Avg.
Nambe Creek	Fair	Fair
Rio Ojo Caliante	Fair	Fair
Rio Pueblo de Taos	Fair	Fair
Santa Fe Creek	Avg.	Avg.

The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Pecos	1	84	148
Rio Chama	3	60	92
Rio Grande, NM	8	73	110
Red River	2	51	67

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Pecos	2	81	100
Rio Chama	-	--	--
Rio Grande	3	94	100
Red River	1	93	67

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Alamorgordo	111	40	95	80
Caballo	344	40	42	50
Conchas	273	129	178	185

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Elephant Butte	2195	427	841	442
El Vado	195	87	127	2
McMillan-Avalon	38	36	11	19

† 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
FEBRUARY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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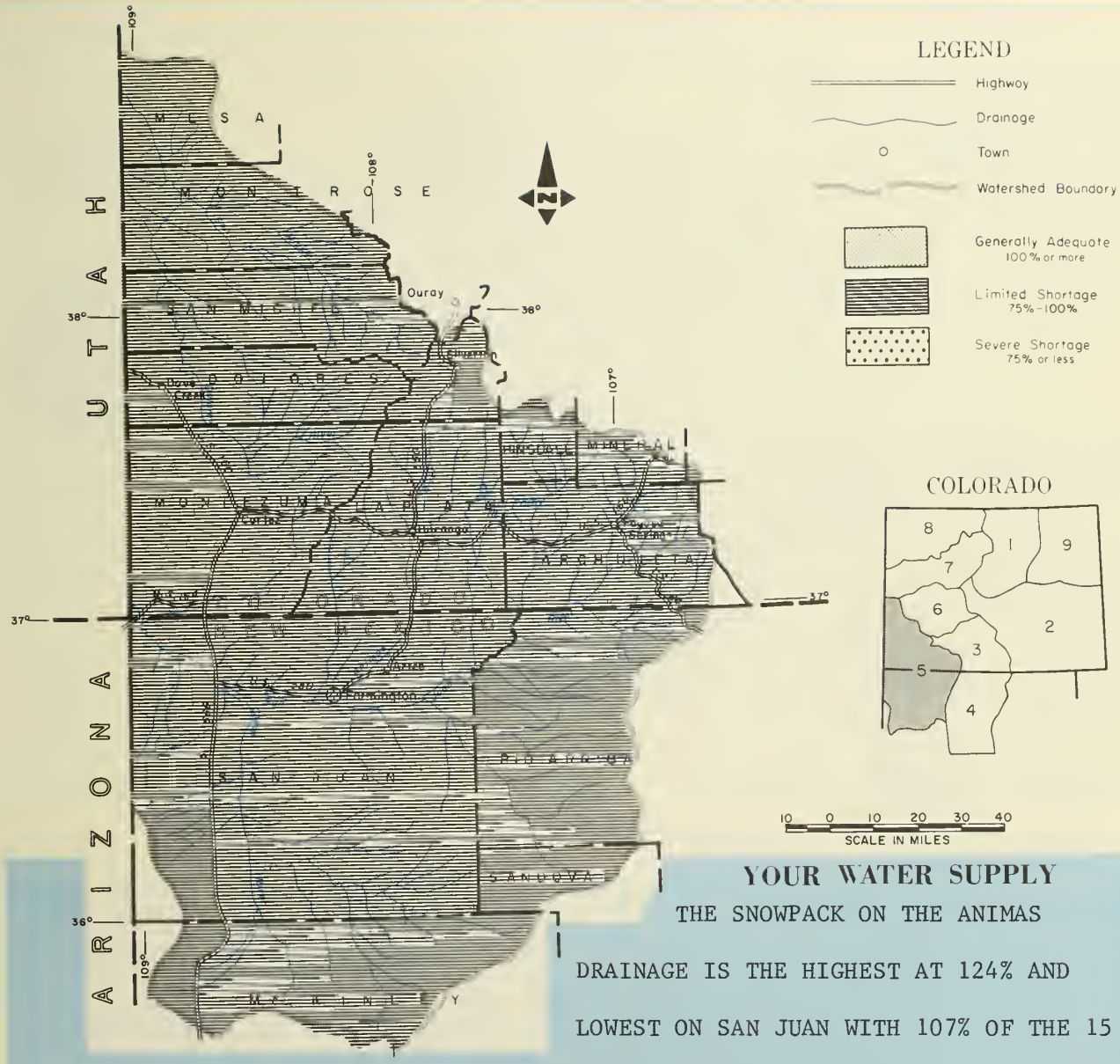

YOUR WATER SUPPLY

THE SNOWPACK ON THE ANIMAS DRAINAGE IS THE HIGHEST AT 124% AND LOWEST ON SAN JUAN WITH 107% OF THE 15 YEAR NORMAL. ALL DRAINAGES HAVE LESS SNOW THIS YEAR THEN LAST. CARRYOVER STORAGE IN NAVAJO IS 958,000 ACRE FEET, CONSIDERABLY ABOVE NORMAL. OTHER RESERVOIRS IN THE BASIN ARE LOW. VALLEY SOILS ARE REPORTED AS DRY.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

MARION E. STRONG – STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

D. W. GILLASPIE – AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E. TATUM – AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1975.			

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Exc.	Avg.
Mancos	Exc.	Avg.
San Miguel	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	120	124
Dolores	5	81	112
San Juan	5	89	107

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas *	-	--	--
Dolores	3	213	40
San Juan *	-	--	--

*Meter malfunction.

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	9	--	9
Jackson Gulch	10	3	--	4
Lemon	40	6	19	19
Navajo	1696	958	1041	577
Vallecito	126	27	70	53

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

FEBRUARY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THERE IS MORE SNOW REPORTED ON UNCOMPAHGRE CREEK THAN ANY OTHER BASIN IN THE STATE. SURFACE AND GUNNISON RIVER BASINS INDICATE ABOUT NORMAL SNOW. CARRY-OVER STORAGE IS JUST SLIGHTLY BELOW NORMAL. BLUE MESA CONTAINS 435,000 A.F. VALLEY SOIL MOISTURE IS REPORTED GOOD BY UNCOMPAHGRE VALLEY WATER USERS, BUT ONLY FAIR IN THE GUNNISON AREA.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1975.			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Exc.	Avg.
Taylor	Exc.	Avg.

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average +
Gunnison	10	84	106
Surface Creek	3	86	94
Uncompahgre	3	102	134

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average +
Gunnison	1	77	100
Surface Creek*	-	--	--
Uncompahgre*	-	--	--

*Station malfunction.

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average +
Blue Mesa	830	435	465	491
Morrow Point	121	115	115	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average +
Silver Jack	14	5	5	--
Taylor	106	51	63	63

+ 1958-1972 period.

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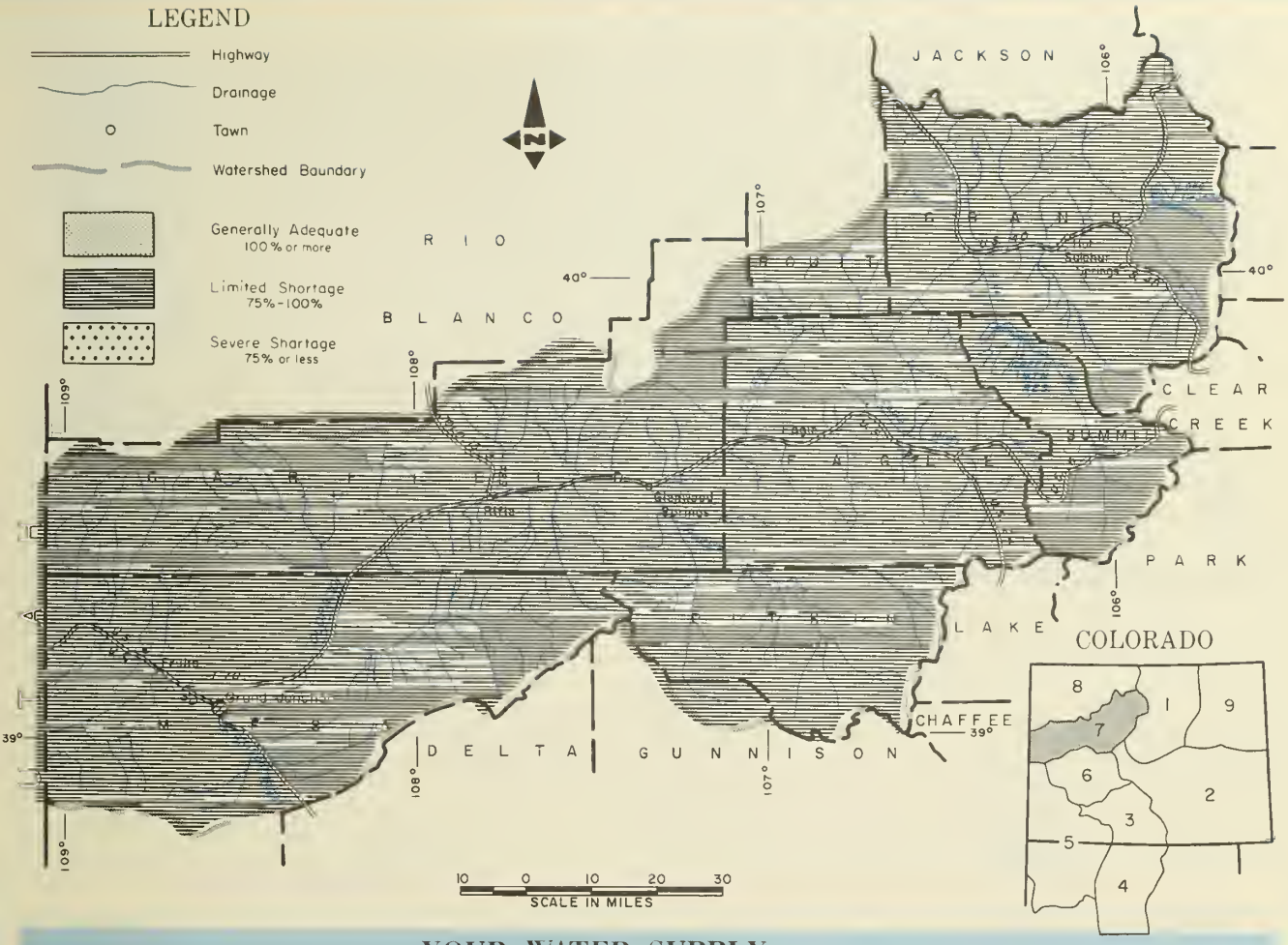
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO

as of

FEBRUARY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE COLORADO RIVER BASIN HAS ABOUT NORMAL SNOW. IT VARIES FROM A HIGH OF 112% ON THE BLUE TO A LOW OF 91% ON PLATEAU AND WILLOW. MOUNTAIN SOILS ARE DRY. MOST IRRIGATED AREAS ARE REPORTING ONLY FAIR MOISTURE IN THEIR SOILS. CARRYOVER STORAGE IS DOWN SLIGHTLY FROM LAST YEAR BUT STILL 110% OF THE 15 YEAR AVERAGE.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1975.			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush Creek	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (5).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	7	94	112
Colorado	18	85	108
Plateau	3	84	91
Roaring Fork	6	80	106
Williams Fork	3	73	107
Willow	2	66	91

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	70	82
Colorado	3	83	89
Roaring Fork	1	84	67
Willow	1	70	62

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	213	239	234
Granby	466	330	403	255
Green Mountain	147	77	84	77
Homestake	43	33	31	20

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	66	70	70
Williams Fork	97	43	51	34
Willow Creek	9	6	7	6
Vega	32	6	13	10

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

FEBRUARY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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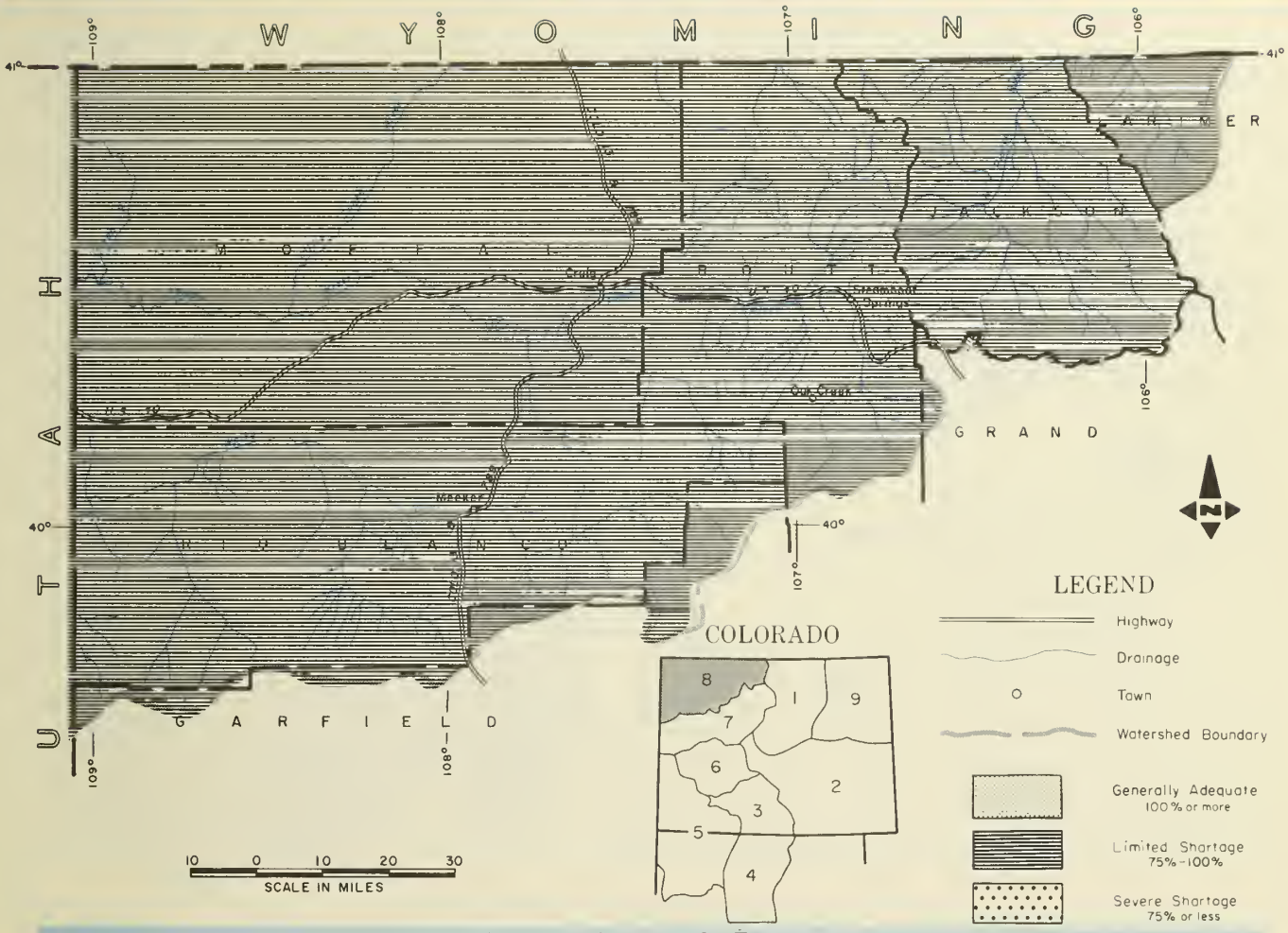

YOUR WATER SUPPLY

SNOWFALL IN THE NORTHERN THIRD OF COLORADO IS SLIGHTLY ABOVE NORMAL EXCEPT ON THE LARAMIE RIVER BASIN WHERE IT IS ONLY 82% OF THE 15 YEAR NORMAL. VALLEY AREAS IN THIS PORTION OF THE STATE ARE DRY AND THE MOUNTAIN SOILS CONTAIN ONLY ABOUT 80% OF NORMAL SOIL MOISTURE. ADDITIONAL SNOW IS NEEDED TO ASSURE ADEQUATE WATER THIS SUMMER.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1975.			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Avg.	Avg.
Hunt Creek	Avg.	Avg.
Illinois River	Avg.	Avg.
Michigan River	Avg.	Avg.
Oak Creek	Exc.	Avg.
Trout Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average +
Elk	2	82	105
Laramie	1	62	82
North Platte	5	83	109
White	2	100	111
Yampa	4	102	128

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average +
Laramie	1	83	79
North Platte	2	72	78
Yampa	1	83	86

+ 1958-1972 period.

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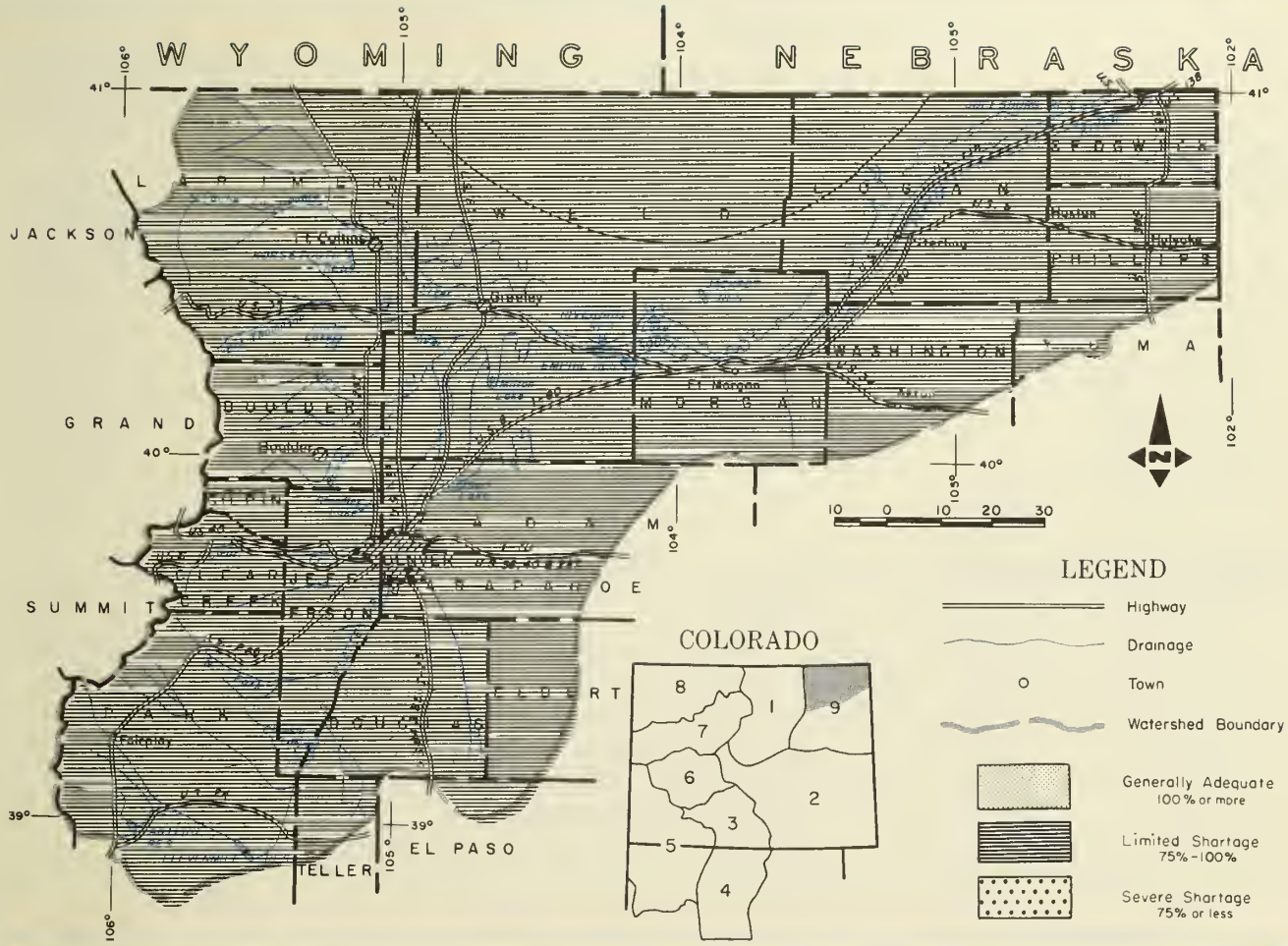
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

FEBRUARY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK IN THE SOUTH PLATTE DRAINAGE IS NEAR NORMAL. THE NORTHERN TRIBUTARIES HAVE JUST SLIGHTLY LESS THAN NORMAL SNOW BUT THE MAINSTEM, CLEAR CREEK, AND SAINT VRAIN ARE SLIGHTLY ABOVE. SOIL IN THE IRRIGATED AREAS IS VERY DRY. A GOOD SNOW IS BADLY NEEDED. CARRYOVER STORAGE IS SLIGHTLY DOWN FROM LAST YEAR BUT STILL AT THE NEAR NORMAL LEVELS.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M. ALT - AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1975.			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Ft. Morgan	Avg.	Fair
South Plate from Ft. Morgan to Sterling	Avg.	Fair
South Platte below Sterling	Avg.	Fair

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	77	95
Boulder	3	83	97
Cache La Poudre	7	72	98
Clear Creek	6	95	110
Saint Vrain	2	106	108
South Platte	2	126	121

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	105	78
Boulder	1	100	82
Cache La Poudre	2	81	81
Clear Creek	2	82	80
Saint Vrain	1	100	82
South Platte	2	68	80

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	85.4	82.9	77.3
Cheeseman	79.0	41.0	52.5	56.1
Eleven Mile	97.8	96.5	97.8	87.2
Empire	37.7	6.6	5.3	26.5
Horsetooth	143.5	81.4	106.6	85.5

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	26.0	24.6	28.0
Julesburg	28.2	19.8	19.8	20.1
Point of Rocks	70.0	57.1	69.8	53.4
Prewitt	32.8	28.4	22.0	15.9
Riverside	57.5	55.4	29.4	44.6

+ 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1975

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	1/29	38	8.5	13.5	10.4
McIntyre	NS			---	---
Roach	1/29	42	9.9	17.0	---
North Platte River					
Cameron Pass	1/30	53	17.8	20.5	16.5
Columbine Lodge	1/30	64	18.5	19.7	14.3
Northgate	1/30	16	3.6	6.1	3.8
Park View	1/28	26	5.5	7.2	5.8
Willow Cr. Pass (B)	1/28	30	7.1	10.0	7.7
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	1/29	23	4.8	5.0	5.1
Boulder Falls	1/29	35	7.6	9.5	7.1
University Camp	1/29	46	10.1	12.5	10.9
Big Thompson River					
Deer Ridge	1/30	12	2.3	4.3	2.9
Hidden Valley	1/30	32	6.1	7.4	6.4
Lake Irene	1/28	52	12.5	15.4	13.8
Long's Peak	1/30	30	6.4	8.3	6.0
Two Mile	1/30	38	8.6	11.1	8.6
Cache La Poudre					
Bennett Creek	1/29	16	3.2	8.6	---
Big South	1/30	6	1.9	0.5	1.4
Cameron Pass	1/30	53	17.8	20.5	16.5
Chambers Lake	1/30	22	6.0	8.8	5.6
Deadman Hill	1/29	38	8.5	13.5	10.4
Hourglass Lake	1/29	19	3.6	7.8	---
Joe Wright	1/30	52	15.5	18.0	---
Lost Lake	1/30	31	7.5	10.4	7.7
Pine Creek	1/29	6	0.9	3.0	1.3
Red Feather	1/29	17	3.2	6.6	4.0
Clear Creek					
Baltimore (B)	1/29	23	4.8	5.0	5.1
Berthoud Falls	1/29	44	9.9	11.0	8.3
Empire	1/29	28	5.8	6.0	4.5
Grizzly Peak (B)	1/29	51	12.2	13.5	10.6
Loveland Lift	1/29	43	11.3	10.5	12.2
Loveland Pass	1/29	41	10.7	11.8	9.0
St Vrain River					
Copeland Lake	1/31	18	3.5	3.4	2.8
Ward	1/31	18	3.4	3.1	3.6
Wild Basin	NS			---	7.2
South Platte River					
Como	1/28	25	4.9	3.1	---
Geneva Park	1/28	18	2.8	2.3	---
Hoosier Pass	1/29	37	9.6	8.6	8.0
Horseshoe Mt.	1/27	42	8.9	6.4	---
Jefferson Creek	1/28	34	7.2	4.7	5.9
Mosquito	1/29	35	7.8	5.2	---
Trout Creek Pass	1/27	20	4.3	4.0	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	1/28	26	5.6	8.1	---
Cooper Hill (B)	1/31	37	7.4	9.0	6.9
East Fork	1/29	30	6.7	6.8	6.0
Four Mile Park	1/30	23	4.2	3.5	3.9
Fremont Pass	1/29	42	10.6	11.0	9.8
Garfield	1/30	39	11.0	10.8	8.5
Hermit Lake	1/29	29	7.3	9.0	---
Monarch Pass	1/30	50	13.7	12.9	10.3
Tennessee Pass	1/30	31	6.1	5.9	6.5
Twin Lakes Tunnel	1/24	22	4.4	7.9	6.0
NOTE Westcliffe	1/29	28	6.5	7.4	---

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTEN (INCHES): LAST YEAR	PAST RECORD: WATER CONTEN (INCHES): AVG 58-72
Cucharas River					
Apishapa	1/29	19	5.3	9.3	4.5
Cucharas Creek	1/29	22	5.8	---	---
La Veta Pass (B)	1/29	24	6.6	9.9	5.6
Purgatorie River					
Bourbon	1/30	24	5.2	4.9	---
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	1/31	24	3.2	4.5	3.5
Summitville	1/29	47	10.2	14.9	11.9
Conejos River					
Cumbres	1/30	42	10.6	17.2	13.1
La Manga	1/30	47	8.9	15.8	---
Platoro	2/02	46	8.3	12.0	12.5
River Springs	1/29	19	3.7	5.6	4.3
Culebra River					
Brown Cabin	2/03	18	4.6	7.1	---
Cottonwood (B)	2/03	21	6.4	5.4	---
Culebra	2/03	30	5.8	6.3	5.6
La Veta Pass	1/29	24	6.6	9.9	5.6
Trinchera (B)	2/03	26	5.8	8.2	---
Rio Grande					
Cochetopa Pass	1/28	28	5.0	3.9	3.6
Grayback	1/29	38	7.4	11.5	---
Hiway	1/31	70	16.5	16.2	15.6
Lake Humphrey	1/30	33	5.1	3.7	4.8
Love Lake	1/30	37	7.3	4.4	---
Pass Creek	1/31	47	8.9	10.0	8.2
Pool Table	1/30	22	3.2	2.8	5.2
Porcupine	1/30	36	7.6	5.3	8.1
Santa Maria	1/31	31	5.9	3.9	3.3
Upper Rio Grande	1/30	38	6.7	4.7	5.8
Wolf Creek Pass	1/31	78	19.2	19.8	17.4
Wolf Cr. Sum. (B)	1/31	81	19.2	20.2	18.5
RIO GRANDE BASIN - NM					
Pecos River					
Panchuela	1/30	20	3.7	4.4	2.5
Rio Chama					
Bateman	1/28	28	6.1	8.2	---
Capulin Peak	1/30	17	3.0	4.9	3.5
Chama Divide	1/29	10	2.0	4.7	2.9
Chamita	1/31	28	5.9	8.6	5.5
Rio Grande					
Big Tesuque	1/29	17	3.4	6.8	4.0
Cordova	NS			---	6.2
Elk Cabin	1/27	18	4.7	5.6	2.7
La Cueva	1/27	14	3.1	5.2	---
Hopewell	1/29	35	7.8	14.0	---
Pajarito Peak	1/31	9	2.0	1.2	1.1
Payrole	1/29	23	5.0	7.4	6.1
Rio En Medio	1/29	21	5.0	9.0	6.0
Sandoval	1/31	19	3.9	3.5	3.5
Taos Canyon	1/23	17	3.8	5.8	2.7
Teakettle	1/29	24	4.9	6.8	---
Tres Ritos	1/30	22	4.4	4.6	3.3
Rio Hondo					
Taos Powderhorn	1/29	50	13.6	---	---
Red River					
Hematite Park	1/27	11	2.1	4.0	2.9
Red River	1/27	12	2.3	4.7	3.7

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1975

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	1/30	42	9.6	9.6	8.0
Lemon	1/31	34	7.4	7.1	---
Mineral Creek	1/30	49	13.0	8.7	9.9
Molas Lake	1/30	38	10.1	10.5	8.7
Purgatory	1/30	58	15.2	12.4	---
Red Mountain Pass	1/30	82	23.0	18.8	19.0
Silverton Sub-Sta.	1/30	31	8.1	6.9	5.6
Spud Mountain	1/30	64	18.3	14.0	15.2
Dolores River					
Lizard Head	1/30	42	11.4	13.9	10.4
Lone Cone	1/29	41	10.6	13.9	11.8
Rico	1/30	21	5.4	8.5	5.6
Telluride	1/30	28	7.0	7.8	4.7
Trout Lake	1/30	40	11.2	11.9	8.1
San Juan River					
Chama Divide (B)	1/29	10	2.0	4.7	2.9
Chamita (B)	1/31	28	5.9	8.6	5.5
Upper San Juan	1/31	83	21.6	22.9	19.1
Wolf Cr. Pass (B)	1/31	78	19.2	19.8	17.4
Wolf Cr. Summit	1/31	81	19.2	20.2	18.5
GUNNISON BASIN					
Gunnison River					
Alexander Lake	1/30	43	11.3	14.1	12.7
Blue Mesa	NS			---	---
Butte	1/30	40	9.7	11.7	---
Cochetopa Pass (B)	1/28	28	5.0	3.9	3.6
Crested Butte	1/30	41	8.7	13.3	7.4
Keystone	1/29	55	13.7	16.7	13.1
Lake City	1/27	26	5.3	6.3	---
Mesa Lakes (B)	1/30	41	11.3	11.0	10.5
McClure Pass	1/29	42	10.8	13.3	11.1
Park Cone	1/29	31	5.9	8.3	6.1
Park Reservoir	1/31	53	12.8	16.2	14.6
Porphyry Creek	1/30	50	13.0	13.6	10.0
Tomichi	1/30	42	10.7	11.9	8.1
Surface Creek					
Alexander Lake	1/30	43	11.3	14.1	12.7
Mesa Lakes (B)	1/30	41	11.3	11.0	10.5
Park Reservoir	1/31	53	12.8	16.2	14.6
Uncompahgre River					
Ironton Park	1/30	42	12.4	15.1	8.0
Red Mountain Pass	1/30	82	23.0	18.8	19.0
Telluride (B)	1/30	28	7.0	7.8	4.7
COLORADO BASIN					
Blue River					
Blue River	1/29	29	5.9	6.3	5.2
Fremont Pass	1/29	42	10.6	11.0	9.8
Frisco	1/29	28	5.4	4.9	4.4
Grizzly Peak	1/29	51	12.2	13.5	10.6
Hoosier Pass (B)	1/29	37	9.6	8.6	8.0
Shrine Pass	1/29	49	11.9	13.4	10.3
Snake River	1/29	24	4.4	6.2	5.2
Summit Ranch	1/29	20	3.9	6.0	---
Colorado River					
Arrow	1/29	39	8.6	11.2	7.5
Berthoud Pass	1/28	45	10.6	11.4	9.4
Berthoud Summit	1/29	49	13.3	14.3	11.4
Cooper Hill				9.0	6.9
Fiddler Gulch	NS			---	9.0
Glenmar Ranch	1/28	24	5.4	7.3	5.1
Gore Pass	1/29	34	8.6	7.4	6.2
Grand Lake	1/29	31	5.2	7.8	4.9
Lake Irene	1/28	52	12.5	15.4	13.8
Lapland	1/27	30	7.0	7.9	6.6
Lulu	NS			---	---
Lynx Pass	1/29	40	9.0	7.7	7.6
McKenzie Gulch	1/28	26	4.0	6.5	4.1
Middle Fork	1/29	28	6.3	9.3	5.7
Milner	1/28	38	8.7	10.0	---
North Inlet	1/29	31	7.0	7.0	5.1
Pando	1/29	30	5.3	6.2	6.0
Phantom Valley	1/28	52	7.5	7.0	6.5
Ranch Creek	1/29	28	5.7	8.2	5.6
Tennessee Pass (B)	1/30	31	6.1	5.9	6.5
Vail Pass	1/29	49	10.5	13.3	10.4
Vasquez	1/30	35	7.7	9.8	7.7
Roaring Fork River					
Aspen	1/28	46	10.9	12.8	10.0
Chapman	NS			---	---
Independence Pass				10.1	9.7
Ivanhoe	1/28	45	11.4	14.3	10.2
Kiln	1/28	37	8.0	10.0	---
Last Chance	NS			---	---
Lift	1/28	40	10.1	13.4	10.1
McClure Pass	1/29	42	10.8	13.3	11.1
Nast	1/29	26	5.1	6.8	4.3
North Lost Trail	1/29	42	10.6	12.8	10.0
Williams Fork River					
Glenmar Ranch	1/28	24	5.4	7.3	5.1
Jones Pass	1/28	40	9.2	12.0	8.7
Middle Fork	1/29	28	6.3	9.3	5.7
Willow Creek					
Granby	1/28	24	4.2	7.1	4.7
Willow Creek Pass	1/28	30	7.1	10.0	7.7
Plateau Creek					
Mesa Lakes	1/30	41	11.3	11.0	10.5
Park Reservoir	1/31	53	12.8	16.2	14.6
Trickle Divide	1/31	54	13.2	17.0	16.0
YAMPA BASIN					
Elk River					
Elk River	1/30	47	12.0	14.7	11.4
Hahn's Peak	1/30	43	10.1	13.1	---
White River					
Burro Mountain	1/29	53	13.2	10.9	11.5
Rio Blanco	1/28	41	9.5	11.7	9.0
Yampa River					
Bear River	NS			---	---
Buffalo Pass	NS			34.0	---
Columbine Lodge (B)	1/30	64	18.5	19.7	14.3
Dry Lake	1/29	52	14.8	---	12.0
Lynx Pass (B)	1/29	40	9.0	7.7	7.6
Rabbit Ears	1/30	68	20.2	19.4	16.1
Yampa View	1/30	47	13.4	13.0	9.8

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1975

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	10/11/74	11.1	6.2	8.5	6.6
Willow Pass	9/30/74	9.5	4.3	6.1	6.9
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	10/01/74	6.9	3.1	3.1	3.8
Big Thompson River					
Beaver Dam	10/01/74	7.1	3.6	3.3	4.1
Guard Station	10/01/74	6.9	3.2	2.9	4.8
Two Mile	10/01/74	9.1	4.4	4.5	5.5
Clear Creek					
Clear Creek	1/03/75	9.5	5.3	7.1	6.8
Hoop Creek	10/25/74	4.9	2.5	2.4	2.9
Cache La Poudre River					
Feather	10/04/74	10.1	3.9	5.1	4.7
Laramie Road	10/03/74	12.4	6.2	7.4	7.8
South Platte River					
Hoosier Pass	10/08/74	7.8	3.6	5.5	4.9
Kenosha Pass	10/08/74	4.4	2.4	3.3	2.6
ARKANSAS BASIN					
Arkansas River					
Garfield	9/27/74	6.7	3.6	5.2	4.0
Leadville	9/30/74	7.8	3.5	4.1	4.1
Twin Lakes Tunnel	9/30/74	4.5	1.5	2.2	2.1
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	11/13/74	10.7	5.4	4.7	5.3
Rio Grande					
Bristol View	11/14/74	6.1	2.5	2.3	4.0
La Veta	11/13/74	11.9	5.1	6.4	7.6
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	No Report	6.7	---	2.7	2.5
Chamita	No Report	8.0	---	4.4	2.6
Rio Grande					
Aqua Piedra	1/22/75	7.2	3.7	3.5	3.6
Big Tesuque	10/16/74	3.7	1.7	2.0	1.6
Rio En Medio	10/16/74	3.5	1.2	1.6	1.4
Taos Canyon	1/23/75	3.3	2.1	2.2	2.2
Red River					
Red River Summit	1/27/75	4.8	1.4	1.5	2.1

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1975

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	No Report	9.1	---	3.8	6.0
Mineral Creek	No Report	5.7	---	2.9	3.4
Molas Lake	No Report	9.4	---	7.1	4.8
Dolores River					
Dolores	10/30/74	19.6	5.1	2.0	7.7
Lizard Head	10/30/74	11.8	1.9	1.2	6.9
Rico	10/30/74	13.8	2.8	1.4	9.6
GUNNISON BASIN					
Gunnison River					
King	9/27/74	3.3	2.0	2.6	2.0
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	10/08/74	4.2	2.3	3.3	2.8
Colorado River					
Berthoud Pass	10/25/74	3.9	3.3	3.2	2.8
Gore	9/30/74	4.9	2.1	2.4	3.1
Grand Mesa	No Report	12.5	---	11.3	10.3
Ranch Creek	10/25/74	8.7	5.0	4.9	5.8
Vail	No Report	12.3	---	7.1	7.0
Roaring Fork River					
Placita	12/30/74	9.3	3.7	4.4	5.5
YAMPA BASIN					
Yampa River					
Hahn's Peak	10/11/75	19.0	7.2	8.6	8.4

ALL PROFILES 4 FEET DEEP

GPO 857-963

USDA SCS PORTLAND OREG 1987 MTL-1845

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE
Collaborating with
COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
~~FEB.~~ MARCH 1, 1975

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Cabins near Sacajawea Snow Course in Bridger Mountains, Montana.
SCS PHOTO 1 -P480-15

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA SCS PORTLAND OREG 1974

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

M. D. BURDICK
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

MARION E. STRONG
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN
DIRECTOR
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EXPERIMENT STATION

S. E. REYNOLDS
STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER
STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
and
JUDY R. TEILBORG

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATER SUPPLY OUTLOOK

as of

MARCH 1, 1975

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
MARCH 1, 1975

SNOWFALL OVER THE SOUTHERN PART OF COLORADO AND NEW MEXICO WAS ABOVE NORMAL DURING FEBRUARY. THE PROSPECTS ARE EXCELLENT NOW FOR WATER SUPPLIES THIS SUMMER. FORECASTS RANGE AS HIGH AS 135% OF THE 1958-72 AVERAGE. FORECASTS ARE COMPUTED ASSUMING NORMAL CLIMATIC CONDITIONS FOR THE REMAINDER OF THE YEAR.

COLORADO -- THE NORTHERN HALF OF THE STATE HAS ABOUT NORMAL SNOWPACK WHILE THE SOUTHERN HALF HAS BETTER THAN NORMAL. THERE SHOULD BE NO SEVERE WATER SHORTAGES THIS SUMMER. THE SOUTH PLATTE AND ARKANSAS COULD HAVE SOME SHORTAGES DUE TO POOR SOIL MOISTURE AND LOW STORAGE, HOWEVER SEVERAL MONTHS REMAIN FOR THIS SITUATION TO IMPROVE.

NEW MEXICO -- SNOWFALL DURING FEBRUARY VASTLY IMPROVED THE WATER SUPPLY OUTLOOK IN NEW MEXICO. RUNOFF FROM MAJOR STREAMS SHOULD BE EXCELLENT. SMALL STREAMS SHOULD HAVE EXCELLENT EARLY FLOWS WHICH SHOULD BE SUSTAINED FOR A GOOD PORTION OF THE SUMMER. SOIL MOISTURE CONDITIONS ARE POOR, BUT COULD BE IMPROVED WITH A COUPLE OF GOOD RAINS. STORAGE IS DOWN FROM LAST YEAR, BUT STILL ABOUT NORMAL.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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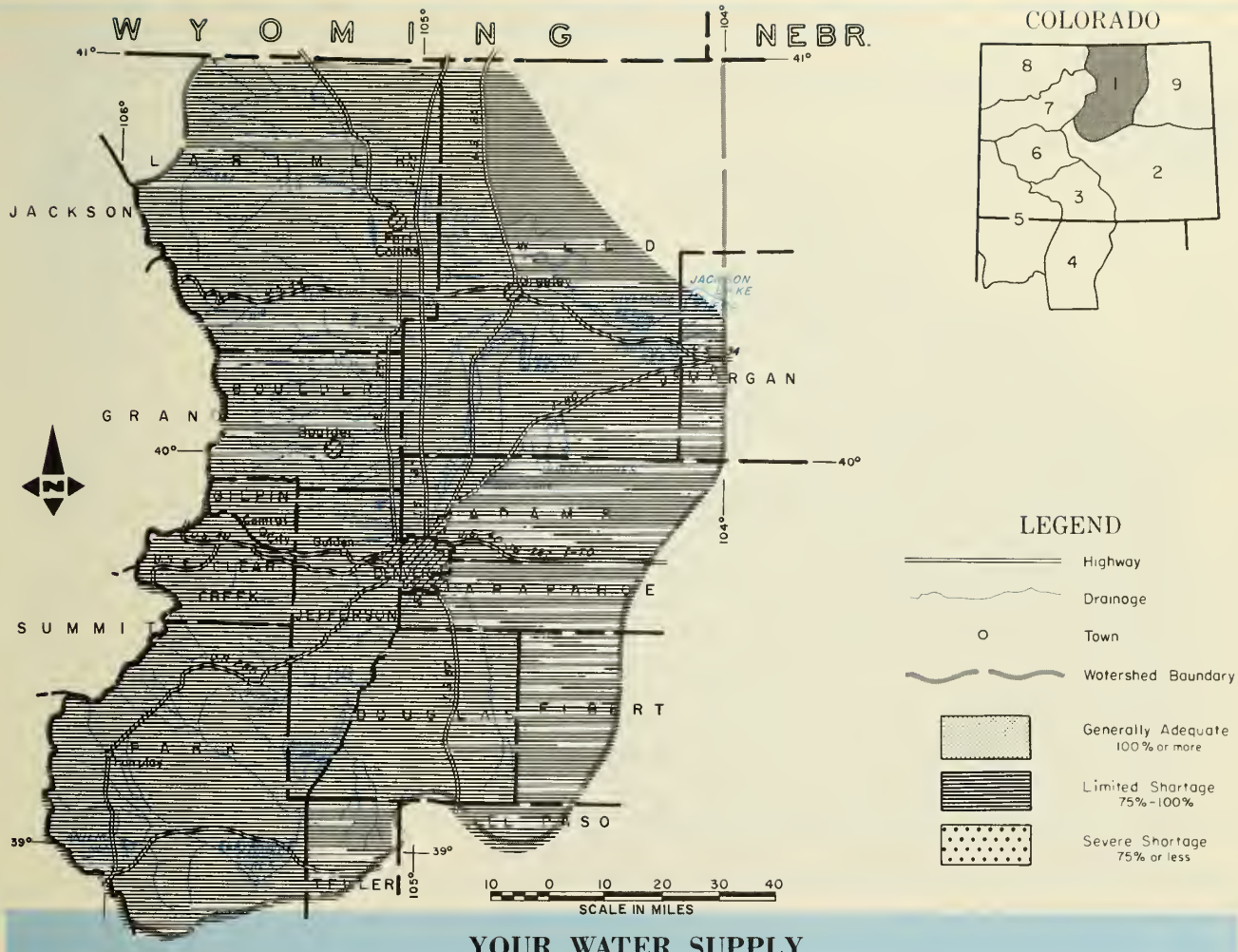
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ADAMS
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ELBERT
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TELLER
GILPIN
CLEAR CREEK
JEFFERSON
BOULDER
WELD
LARIMER
MORGAN
Denver
Boulder
Golden
Fort Collins
Estes Park
Central City
Georgetown
Idaho Springs
Evergreen
Bailey
Pine Junction
Conifer
Kittredge
Morrison
Parker
Castle Rock
Franktown
Elizabeth
Kiowa
Deckers
Lake Dillon
Dillon Reservoir
Jackson Lake
Pikes Peak
Cripple Creek
Colorado Springs
Manitou Springs
Woodland Park
Divide
Cripple Creek
Florissant
Cascade
Green Mountain Reservoir
Ruedi Reservoir
Eagle River
Vail
Leadville
Fairplay
Hartsel
Lake George
Cripple Creek
Victor
Canyon City
Pueblo
Colorado Springs
Fountain
Calhan
Ellicott
Peyton
Falcon
Elizabeth
Kiowa
Parker
Castle Rock
Franktown
Conifer
Pine Junction
Morrison
Kittredge
Evergreen
Bailey
Idaho Springs
Central City
Georgetown
Estes Park
Fort Collins
Boulder
Denver
Golden
Central City
Nederland
Ward
Jamestown
Lyons
Longmont
Brighton
Fort Lupton
Hudson
Keenesburg
Wiggins
Fort Morgan
Brush
Sterling
Julesburg
Holyoke
Haxtun
Akron
Wray
Yuma
Burlington
Kit Carson
Cheyenne Wells
Eastonville
Ramah
Simla
Calhan
Peyton
Falcon
Elizabeth
Kiowa
Deckers
Lake Dillon
Dillon Reservoir

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake(1)	105	98	107
Boulder at Orodell	53	106	49
Cache La Poudre at Canyon Mouth (2)	235	95	247
Clear Cr. at Golden (3)	140	110	127
Saint Vrain at Lyons(4)	77	102	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Avg.	Fair
Coal Creek	Avg.	Fair
North Fork of South Platte	Avg.	Fair
North Fork of Cache La Poudre	Avg.	Fair
Ralston Creek	Avg.	Fair
Rock Creek	Avg.	Fair

(1) Observed flow plus by–pass to power plants. (2) Observed flow minus trans–basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	92	98
Boulder	3	92	101
Cache La Poudre	8	77	90
Clear Creek	6	105	107
Saint Vrain	3	107	102
South Platte	3	158	130

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	105	78
Boulder	1	100	82
Cache La Poudre	2	88	88
Clear Creek	2	84	82
Saint Vrain	1	100	82
South Platte	2	77	91

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Antero	33	16	16	14
Barr Lake	32	27	27	23
Black Hollow	8	5	5	4
Boyd Lake	44	37	44	37
Cache La Poudre	10	7	8	8
Carter Lake	109	100	91	87
Chambers Lake	9	3	4	3
Cheeseman	79	43	50	57
Cobb Lake	34	17	19	15
Eleven Mile	98	97	98	87
Fossil Creek	12	6	7	7
Gross	43	23	29	29

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Halligan	6	5	6	4
Horsetooth	144	90	123	97
Lake Loveland	14	10	11	9
Lone Tree	9	5	8	7
Mariano	5	5	5	5
Marshall	10	6	8	4
Marston	18	16	16	15
Milton	24	15	14	13
Standley	42	27	35	17
Terry Lake	8	6	5	5
Union	13	12	13	10
Windsor	19	11	11	10

+ 1958–1972 period.

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SNOW SURVEY UNIT
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DENVER, COLORADO 80217

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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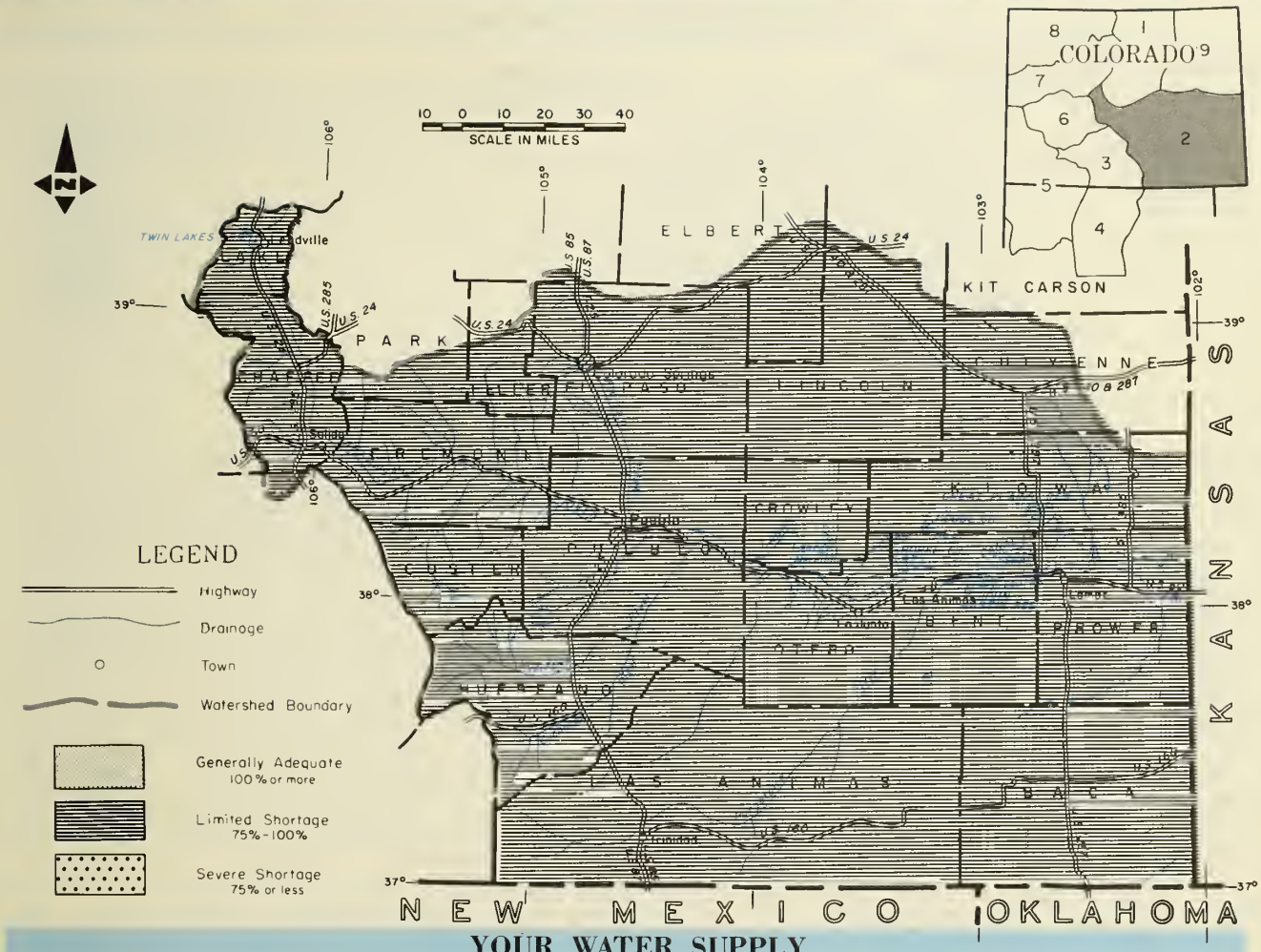

YOUR WATER SUPPLY

RUNOFF ON THE ARKANSAS AND ITS TRIBUTARIES SHOULD BE ABOVE NORMAL IF CURRENT CONDITIONS CONTINUE. CARRYOVER STORAGE IN THE VALLEY RESERVOIRS IS PRACTICALLY NON-EXISTENT. RUNOFF WILL HAVE TO BE GOOD TO PROVIDE ADEQUATE WATER SUPPLIES THIS SUMMER. VALLEY SOIL MOISTURE IS REPORTED AS POOR. SOME VALLEY MOISTURE IS NEEDED BEFORE TIME TO PLANT CROPS. FORECASTS ASSUME NORMAL CONDITIONS FOR THE REMAINDER OF THE YEAR.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A. MOSS – AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

D. W. GILLASPIE – AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	310	107	290
Arkansas at Salida (1)	340	109	313
Cucharas nr La Veta	12	120	10
Purgatoire at Trinidad	41	108	38

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg.	Fair
Fountain Creek	Avg.	Fair
Grape	Avg.	Fair
Hardscrable Creek	Avg.	Fair
Huerfano	Avg.	Fair
Monument Creek	Avg.	Fair

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	110	123
Cucharas	1	69	121
Purgatoire	1	103	112

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	75	84
Cucharas and Purgatoire	1	80	67

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	62	0	18	17
Clear Creek	11	3	4	8
Cucharas	40	0	6	3
Great Plains	150	0	44	59
Horse Creek	27	0	0	7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	354	7	24	90
Meredith	42	0	27	13
Model	15	0	1	4
Turquoise	121	38	48	--
Twin Lakes	58	17	42	26

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of
MARCH 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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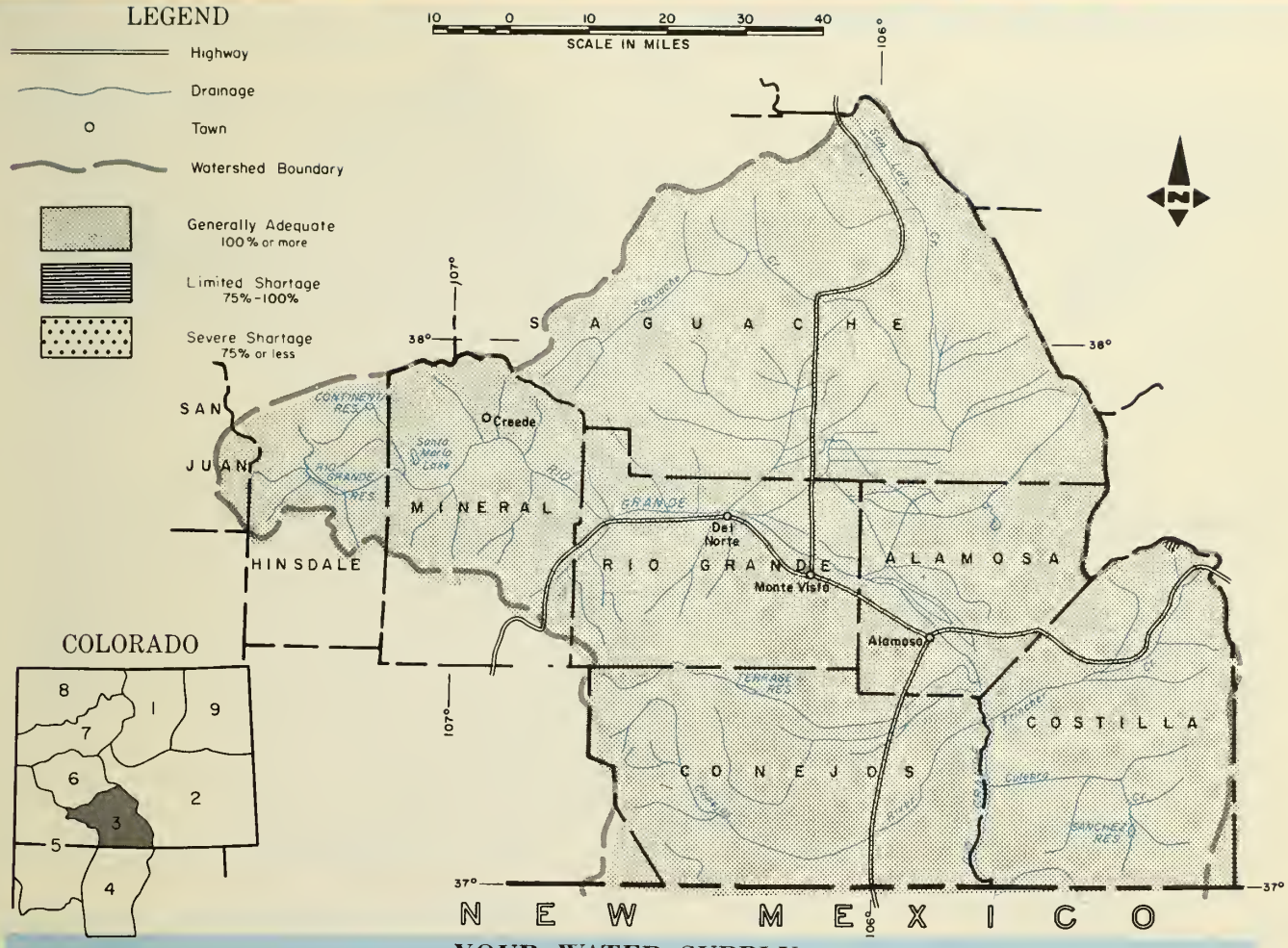

YOUR WATER SUPPLY

STREAMFLOW RUNOFF IN THE RIO GRANDE BASIN SHOULD BE ABOVE NORMAL THIS SUMMER. CURRENT SNOWPACK RUNS FROM 108% OF NORMAL TO 121%. FORECASTS ARE ALL ABOVE NORMAL. CARRYOVER STORAGE IS 84% OF THE 1958-72 AVERAGE, BUT ONLY 47% OF LAST YEAR. MOUNTAIN SOILS ARE GENERALLY DRY. DATA FROM THE IRRIGATED AREAS INDICATE POOR SOIL MOISTURE CONDITIONS.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

D. W. GILLASPIE - AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Alamosa abv Terrace	66	106	62
Conejos nr Mogote (1)	205	111	184
Culebra at San Luis (2)	20	118	17
Rio Grande at 30 Mile Bridge (3)	145	120	121
Rio Grande nr Del Norte (3)	545	117	467
So. Fork at S. Fork	130	113	115

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Avg.	Avg.
Sangre de Cristo Cr.	Avg.	Avg.
Trinchera Creek	Avg.	Avg.

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	104	108
Conejos	3	107	110
Culebra	2	86	113
Rio Grande	10	139	121

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	1	109	63
Conejos	1	115	102
Culebra	1	80	67
Rio Grande	2	87	66

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	27	3	2	5
Platoro	60	19	38	9
Rio Grande	46	8	27	17

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103	5	18	13
Santa Maria	45	4	7	6
Terrace	18	8	9	6

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

MARCH 1, 1975

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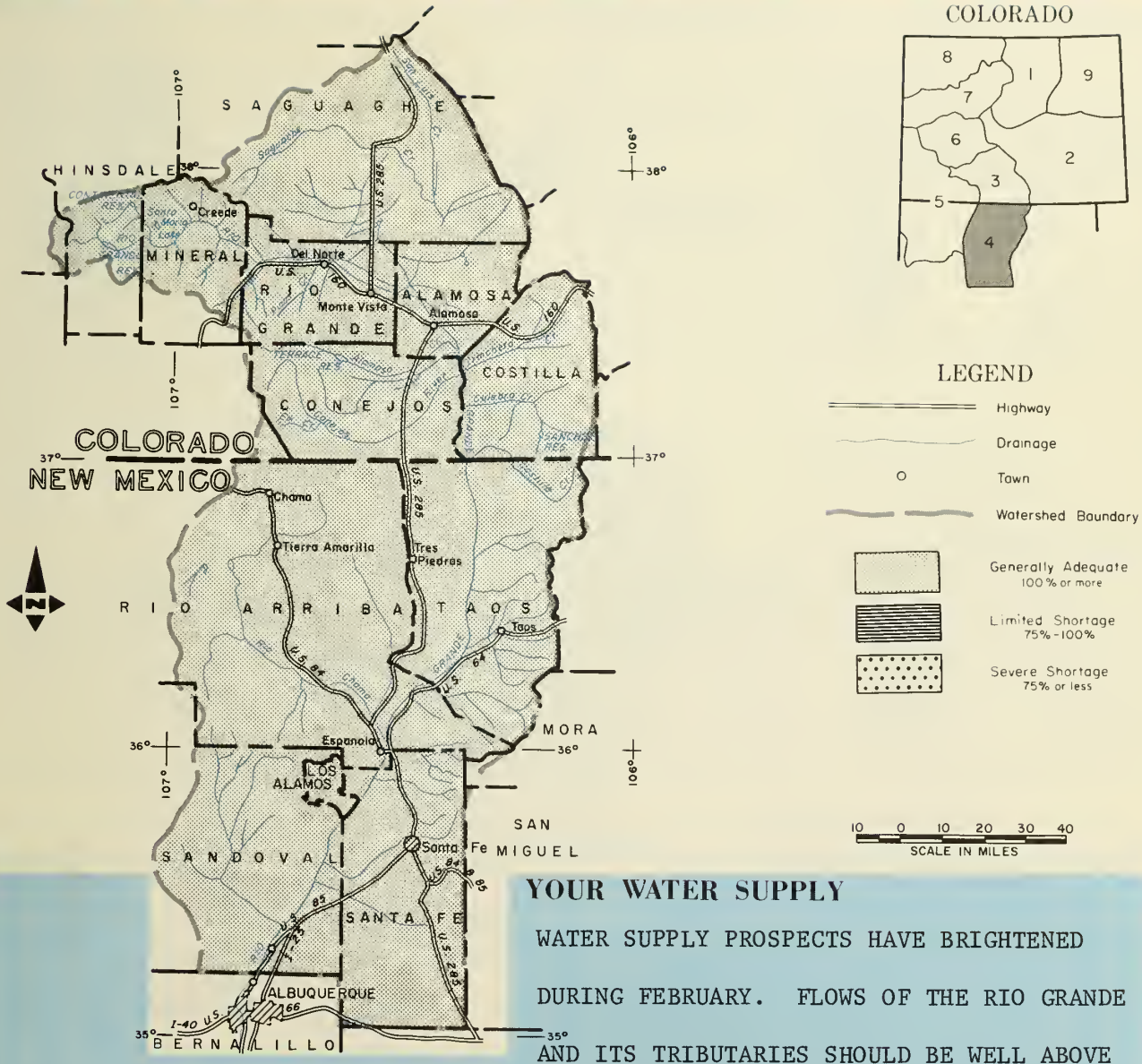

YOUR WATER SUPPLY

WATER SUPPLY PROSPECTS HAVE BRIGHTENED DURING FEBRUARY. FLOWS OF THE RIO GRANDE AND ITS TRIBUTARIES SHOULD BE WELL ABOVE NORMAL THIS SUMMER. SNOWPACK RANGES FROM 136% ON THE PECOS TO 147% OF THE 1958-72 AVERAGE ON THE RED RIVER DRAINAGE. AT LEAST ANOTHER MONTH REMAINS TO INCREASE THE MOUNTAIN SNOWPACK. CARRYOVER STORAGE IS NORMAL.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

MARION E. STRONG – STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

JAMES E. TATUM – AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar–Jul

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Cost. (1)	22	116	19
Pecos at Pecos	57	139	41
Rio Chama at El Vado	240	127	190
Rio Grande at Otowi (2)	658	125	526
Rio Gr. at San Mar (2)	445	125	355
Rio Hondo nr Valdez	18	129	14
Red R. at mouth nr Questa	39	134	29
Jemez R. nr Jemez	37	128	29
Santa Cruz at Cundiyo	16	133	12

The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Exc.	Avg.
Mora River	Exc.	Avg.
Nambe Creek	Exc.	Avg.
Rio Ojo Caliante	Exc.	Avg.
Rio Pueblo de Taos	Exc.	Avg.
Santa Fe Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	94	136
Rio Chama	4	110	145
Rio Grande, NM	10	114	142
Red River	2	121	147

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	1	31	36
Rio Chama	1	25	42
Rio Grande	4	73	91
Red River	1	107	76

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	45	100	79
Caballo	344	43	60	87
Conchas	273	132	175	186
Elephant Butte	2195	473	879	439

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
El Vado	195	89	127	3
McMillen-Avalon	32	38	14	20

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
MARCH 1, 1975

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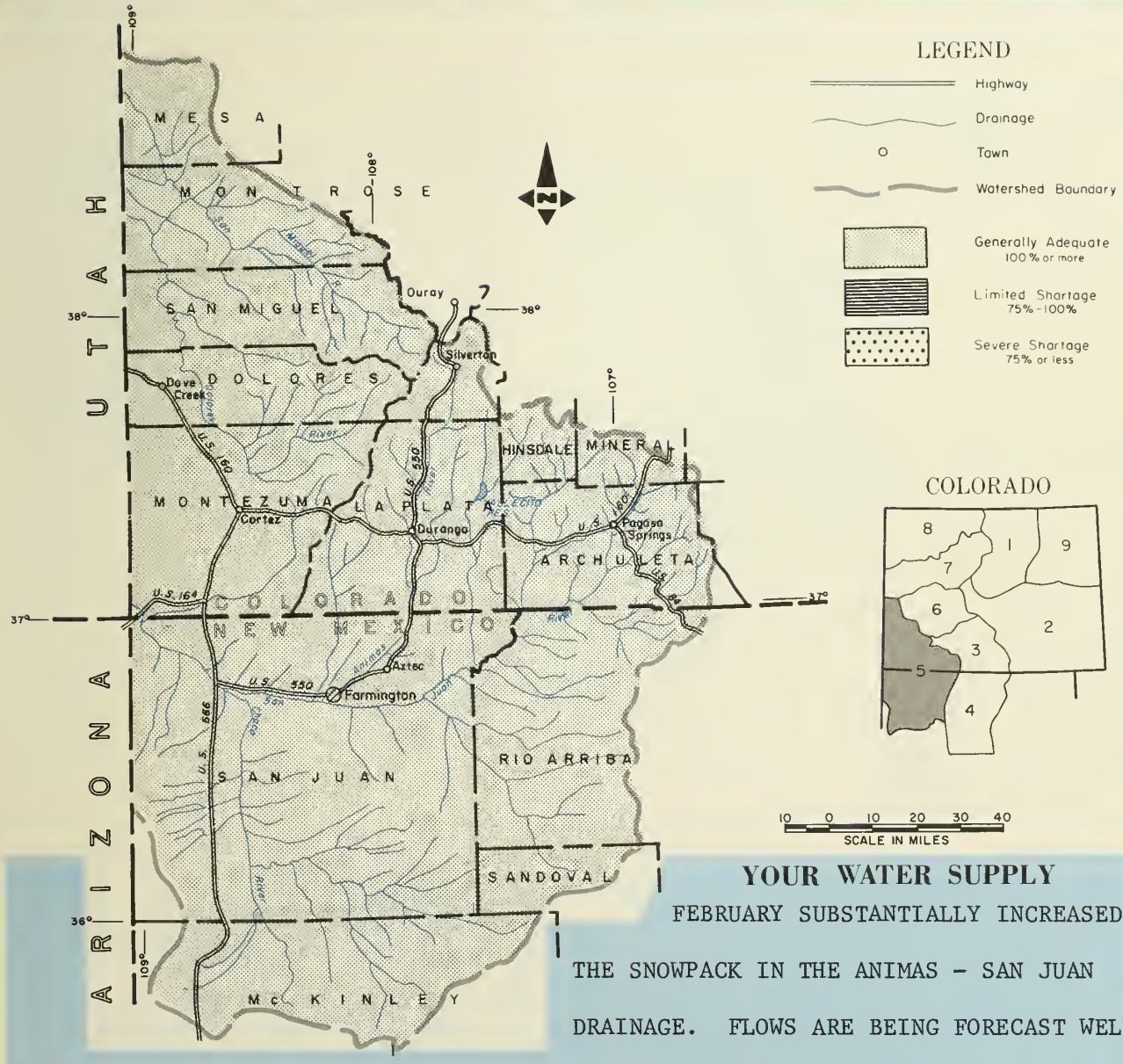

YOUR WATER SUPPLY

FEBRUARY SUBSTANTIALLY INCREASED THE SNOWPACK IN THE ANIMAS - SAN JUAN DRAINAGE. FLOWS ARE BEING FORECAST WELL ABOVE NORMAL RANGING FROM 121% ON THE DOLORES TO 130% OF NORMAL ON THE SAN JUAN. SMALL STREAMS SHOULD ALSO PRODUCE GOOD WATER SUPPLIES THIS SUMMER. CARRYOVER STORAGE IS DOWN FROM LAST YEAR, BUT STILL NEAR NORMAL.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

MARION E. STRONG – STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

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D. W. GILLASPIE – AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E. TATUM – AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	535	126	423
Dolores at Dolores	295	127	232
La Plata at Hesperus	30	125	24
Los Pinos at Bayfield(1)	240	121	198
Piedra Cr. at Arboles	225	122	185
San Juan at Carracas	450	127	354
San Miguel at Placerville	170	131	130
Inflow to Navajo R. (1&2)	750	126	597
Mancos nr Towac	18	129	14

(1) Observed flow plus change in storage in Vallicito Reservoir. (2) April – July

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Exc.	Exc.
Mancos	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	138	125
Dolores	4	113	130
San Juan	5	116	117

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	-	--	--
Dolores	2	267	51
San Juan	-	--	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	9	15	9
Lemon	40	2	19	19
Navajo	1036	278	326	238*
Narraguinnep		6	5	--
Jackson Gulch	10	3	6	4
Vallecito	126	24	70	54

*Less than 15 yrs.

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1958-1972 period.

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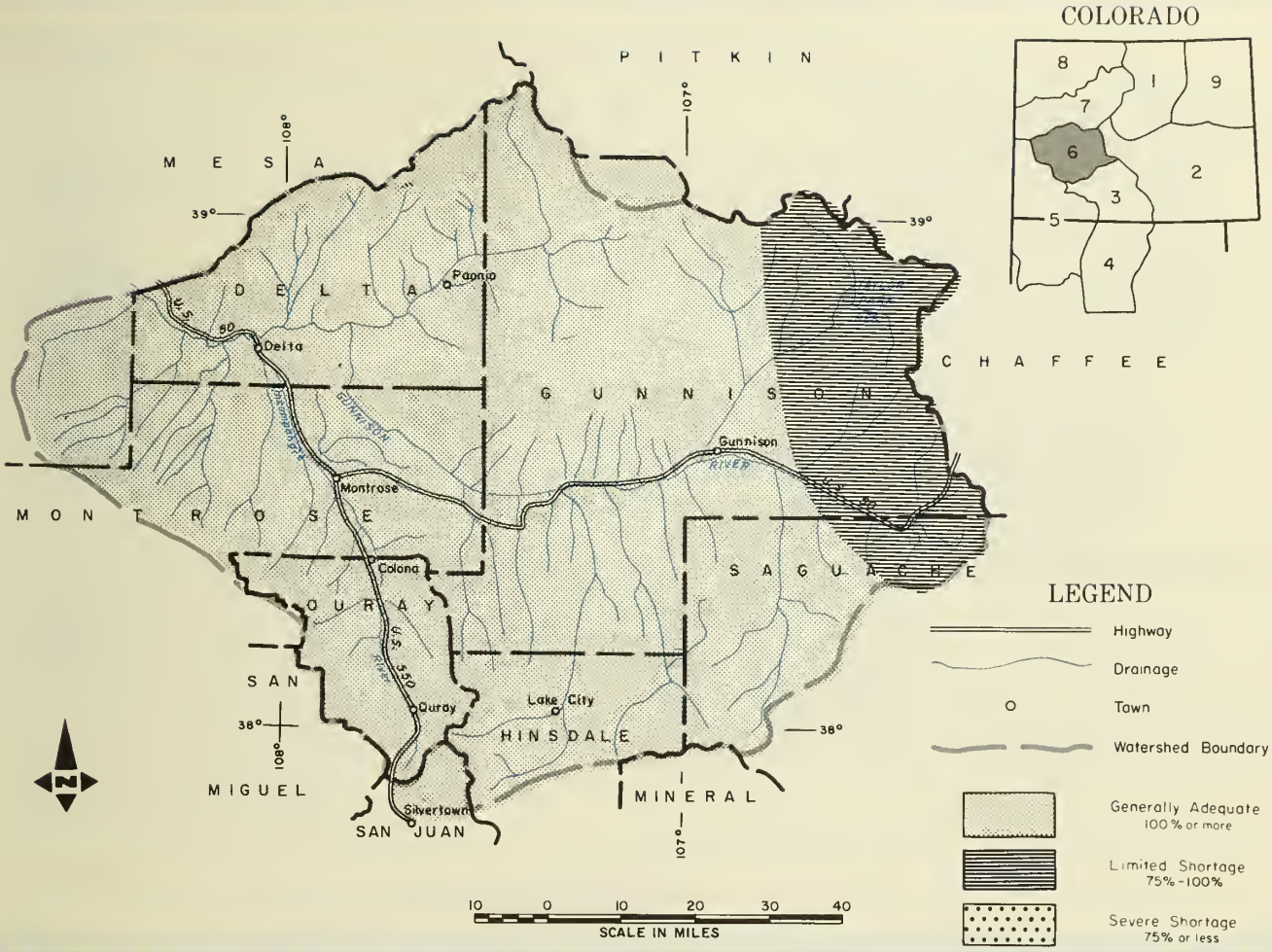
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW IN THE GUNNISON DRAINAGE SHOULD BE SLIGHTLY BETTER THAN THE 15 YEAR AVERAGE. THE UNCOMPAHGRE RIVER COULD FLOW AS MUCH AS 35% ABOVE NORMAL. EARLY FLOWS FROM THE SMALL RIVERS SHOULD BE GOOD, TAPERING OFF WITH THE SEASON. STORAGE IN THE MAJOR RESERVOIRS IS NEARLY NORMAL AND WILL PROVIDE GOOD SUPPLEMENTAL SUPPLIES. VALLEY SOIL MOISTURE IS REPORTED AS FAIR TO GOOD.

This report prepared by

JACK N WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Gunnison R. inflow to Blue Mesa Res. (1)	825	104	792
Gunnison nr Grand Junction (2)	1300	110	1184
N. Fork of Gunnison (3)	275	105	263
Surface Creek nr Cedaredge	17	106	16
Uncompahgre at Colona	180	134	134

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Taylor	Exc.	Avg.

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	12	102	114
Sirface Creek	3	103	101
Uncompahgre	3	123	131

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	77	100
Surface Creek	-	--	--
Uncompahgre	-	--	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	830	380	360	354
Morrow Point	121	115	115	109
Taylor	106	50	63	65

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1958-1972 period.

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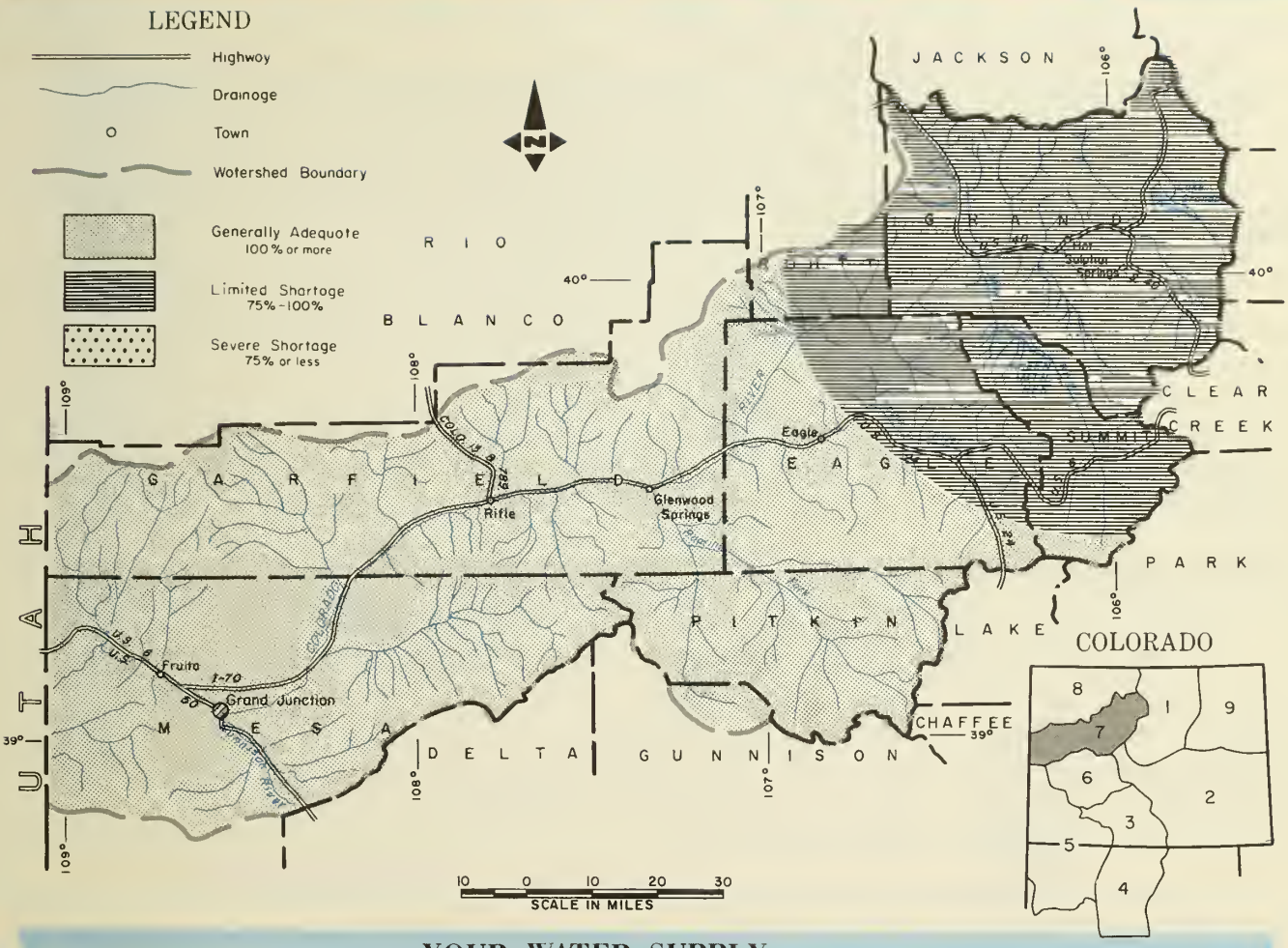
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
MARCH 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMS SHOULD FLOW NEAR NORMAL OVER THE COLORADO BASIN IF SNOWFALL CONTINUES AT LEAST AT A NORMAL RATE. FORECASTS RANGE FROM A LOW OF 94% ON WILLOW CREEK TO A HIGH OF 111% OF NORMAL ON THE WILLIAMS FORK. CARRYOVER STORAGE IS 111% OF THE 15 YEAR NORMAL AND VALLEY SOILS ARE REPORTED TO BE IN FAIR CONDITION.

This report prepared by
JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by
M. D. BURDICK STATE CONSERVATIONIST
DENVER, COLORADO
DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO
U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue R. inflow to Dillon	165	98	169
Blue abv Green Mt. (1)	300	101	297
Colo. R. inflow to Granby Res. (2)	225	99	228
Colo. R. nr Dotsero (3)	1510	105	1434
Roaring Fork at Glenwood (4)	750	105	713
Wm Fk. nr Parshall (5)	70	111	63
Willow Cr. inflow to Willow Cr. Res.	44	94	47
Colorado nr Cameo (6)	2500	105	2370

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (5).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	104	107
Colorado	20	93	106
Plateau	3	100	98
Roaring Fork	7	96	107
Williams Fork	3	84	112
Willow	2	87	101

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	67	79
Colorado	3	100	89
Roaring Fork	1	84	67
Willow	1	78	70

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	211	239	233
Granby	466	308	388	235
Green Mountain	147	70	73	67
Homestake	43	33	27	17

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	61	62	65
Vega	32	7	14	11
Williams Fork	97	38	46	29
Willow Creek	9	7	7	7

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
MARCH 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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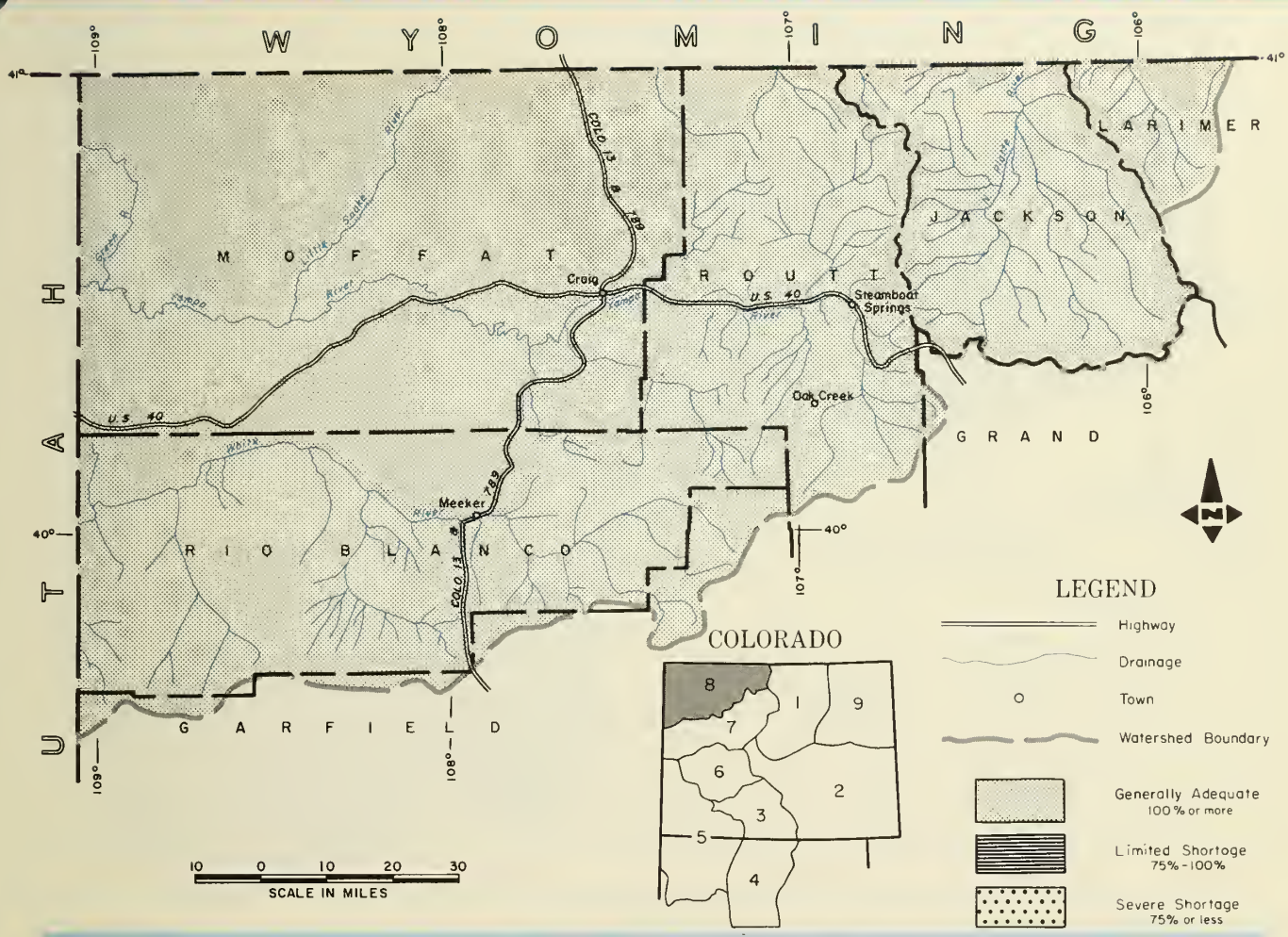

YOUR WATER SUPPLY

WATER SUPPLIES SHOULD BE ADEQUATE IN NORTHWESTERN COLORADO IF SNOWFALL CONTINUES AT A NORMAL RATE. THE ONLY BASIN WITH LESS THAN NORMAL SNOW IS THE LITTLE SNAKE, HOWEVER, WATER SHOULD BE ADEQUATE. SMALL STREAMS SHOULD ALSO PRODUCE WELL THIS SUMMER. MOUNTAIN SOILS ARE DRY AND WILL RETARD FLOWS SLIGHTLY.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON - AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	205	104	198
Laramie nr Woods	128	101	127
Little Snake at Lily	280	86	324
N. Platte at Northgate	290	121	240
White nr Meeker	350	119	295
Yampa nr Maybell	1050	116	905
Yampa at Steamboat Springs	328	120	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Avg.	Fair
Hunt Creek	Avg.	Fair
Illinois River	Avg.	Fair
Michigan River	Avg.	Fair
Oak Creek	Avg.	Fair
Trout Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average +
Elk	2	88	97
Laramie	2	66	82
North Platte	5	88	102
White	2	116	119
Yampa	5	98	115

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average +
Laramie	1	89	85
North Platte	2	75	81
Yampa	1	90	92

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1975

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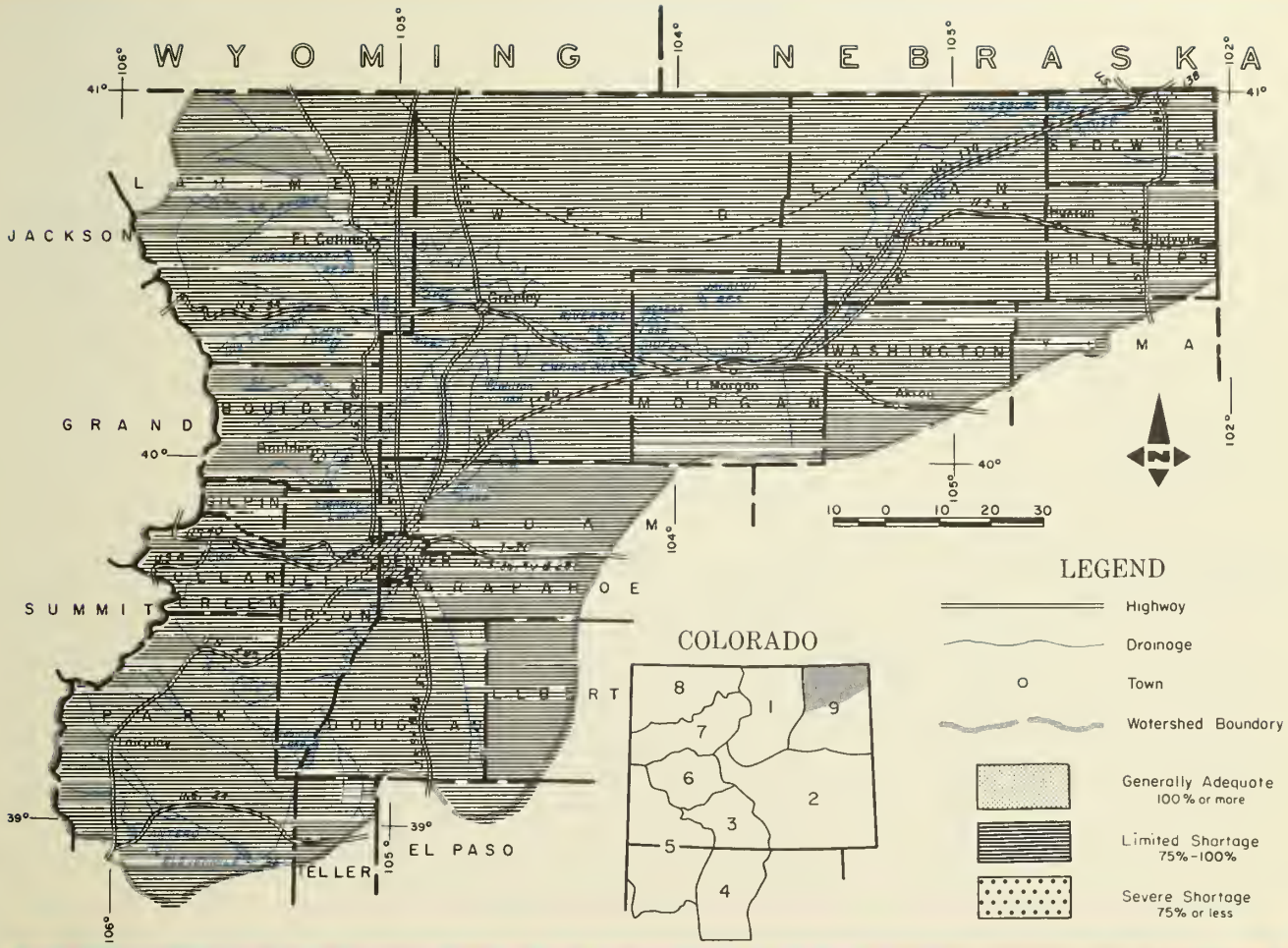

YOUR WATER SUPPLY

THE LOWER PLATTE COULD HAVE SOME SHORTAGES THIS SUMMER UNLESS THE REMAINDER OF THE SEASON PRODUCES GOOD SNOWFALL. FLOWS OF THE PLATTE AND ITS TRIBUTARIES SHOULD BE NEAR NORMAL, BUT SOILS ARE DRY AND STORAGE IS ONLY NORMAL. RESERVOIRS WILL BE HARD PRESSED IF THE CROPS HAVE TO BE WATERED UP. MOUNTAIN SOILS ARE ALSO DRY.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M. ALT – AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	105	98	107
Boulder at Orodell	53	106	49
Cache La Poudre at Canyon Mouth (2)	235	95	247
Clear Cr. at Golden (3)	140	110	127
Saint Vrain at Lyons(4)	77	102	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Ft. Morgan	Avg.	Fair
South Platte from Ft. Morgan to Sterling	Avg.	Fair
South Platte below Sterling	Avg.	Fair

(1) Observed flow plus by–pass to power plants. (2) Observed flow minus trans–basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	92	98
Boulder	3	92	101
Cache La Poudre	8	77	90
Clear Creek	6	105	107
Saint Vrain	3	107	102
South Platte	3	158	130

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	105	78
Boulder	1	100	82
Cache La Poudre	2	88	88
Clear Creek	2	84	82
Saint Vrain	1	100	82
South Platte	2	77	91

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	109	100	91	87
Cheeseman	79	43	50	57
Eleven Mile	98	97	98	87
Empire	38	15	9	30
Horsetooth	144	90	113	97

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35	32	29	32
Julesburg	28	20	20	20
Prewitt	33	26	21	18
Point of Rocks	70	64	70	59
Riverside	58	52	58	53

+ 1958–1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of MARCH 1, 1975

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	2/26	41	10.4	15.8	14.1
Roach	2/25	48	13.4	19.9	14.9
North Platte River					
Cameron Pass	2/25	63	21.6	26.5	22.5
Columbine Lodge	2/27	73	24.2	23.5	20.4
Northgate	2/25	18	4.5	7.0	5.5
Park View	2/26	31	7.5	8.5	7.8
Willow Cr. Pass (B)	2/26	38	10.2	11.4	10.4
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	2/26	24	6.3	7.3	6.2
Boulder Falls	2/25	40	10.4	11.7	10.3
University Camp	2/25	53	15.1	15.4	15.1
Big Thompson River					
Deer Ridge	2/27	17	4.3	4.8	4.0
Hidden Valley	2/27	35	7.8	9.1	8.1
Lake Irene (B)	2/23	62	17.3	19.0	19.0
Long's Peak	2/27	37	9.5	9.7	8.5
Two Mile	2/27	45	11.7	12.4	11.9
Cache La Poudre					
Bennett Creek	2/26	20	4.3	9.6	---
Big South	2/27	5	1.2	0.0	2.3
Cameron Pass	2/25	63	21.6	26.5	22.5
Chambers Lake	2/27	29	8.7	9.5	8.1
Deadman Hill	2/26	41	10.4	15.8	14.1
Hourglass Lake	2/26	20	4.6	9.2	5.3
Joe Wright	2/25	59	18.9	21.9	---
Lost Lake	2/27	38	9.8	10.7	10.2
Pine Creek	2/26	7	1.6	2.6	1.6
Red Feather	2/26	20	4.8	6.8	5.4
Clear Creek					
Baltimore (B)	2/26	24	6.3	7.3	6.2
Berthoud Falls	2/26	49	13.7	13.5	11.6
Empire	2/26	31	8.0	7.6	6.0
Grizzly Peak (B)	2/25	53	15.1	15.3	14.6
Loveland Lift	2/25	51	14.3	12.0	16.9
Loveland Pass	2/25	50	15.1	13.6	12.7
Saint Vrain River					
Copeland Lake	2/28	20	5.3	3.8	3.8
Ward	2/28	22	4.1	4.0	4.8
Wild Basin	2/28	37	9.4	9.8	9.9
South Platte River					
Como	2/26	28	6.7	3.9	---
Geneva Park	2/27	20	4.2	2.8	3.3
Horseshoe Mt.	2/24	48	11.8	6.9	---
Hoosier Pass	2/25	48	12.9	9.8	10.6
Jefferson Creek	2/26	39	10.8	5.1	7.6
Mosquito	2/25	43	11.3	6.0	---
Trout Creek Pass	2/24	27	5.2	4.9	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	2/25	37	7.1	10.0	5.1
Cooper Hill (B)	2/26	39	9.7	10.2	9.0
East Fork	2/26	33	8.5	8.0	8.0
Four Mile Park	2/27	25	6.2	5.1	5.1
Fremont Pass	2/26	47	13.4	13.2	12.9
Garfield	2/27	49	14.6	13.2	11.3
Hermit Lake	2/25	44	12.0	9.8	---
Monarch Pass	2/27	61	18.6	15.6	14.0
Tennessee Pass	2/27	37	9.6	6.6	8.7
Twin Lakes Tunnel	2/24	42	11.5	8.5	8.9
Westcliffe	2/25	38	10.6	9.2	6.0
Cucharas River					
Apishapa	2/27	29	6.9	11.2	---
Cucharas Creek	2/27	33	8.2	---	---
La Veta Pass (B)	2/27	37	8.7	12.7	7.2
Purgatoire River					
Bourbon	2/27	34	6.6	6.4	5.9
RIO GRANDE BASIN - CO					
Alamosa River					
Silver Lakes	2/28	27	6.1	5.4	5.1
Summitville	2/25	60	15.4	15.2	14.7
Conejos River					
Cumbres	2/27	63	17.9	17.6	16.5
La Manga	2/28	61	16.6	15.8	---
Platoro	2/27	51	13.8	13.2	13.9
River Springs	2/27	32	7.3	5.7	5.0
Culebra River					
Brown Cabin	2/28	29	6.7	7.3	---
Cottonwood (B)	NS	--	---	5.5	---
Culebra	2/28	34	8.0	6.4	7.4
La Veta Pass (B)	2/27	34	8.5	12.7	7.2
Trinchera (B)	2/28	29	6.7	8.4	---
Rio Grande					
Cochetopa Pass	2/25	32	7.5	5.4	4.8
Grayback	2/25	50	13.2	12.3	---
Hiway	2/27	84	26.4	18.3	19.5
Lake Humphrey	2/26	31	6.5	3.5	6.1
Love Lake	2/27	42	10.0	5.4	---
Pass Creek	2/27	44	12.0	10.3	9.9
Pool Table	2/27	24	4.2	2.5	6.0
Porcupine	2/27	41	11.5	6.0	9.1
Santa Maria	2/28	28	7.0	3.2	4.1
Upper Rio Grande	2/27	40	9.9	5.3	7.6
Wolf Creek Pass	2/27	74	22.3	21.6	22.0
Wolf Creek Sum. (B)	2/27	92	27.5	20.7	22.5
RIO GRANDE BASIN - NM					
Pecos River					
Panchuela	2/26	19	4.5	4.8	3.3
Rio Chama					
Bateman	2/25	49	13.6	11.6	9.3
Capulin	2/28	22	6.0	5.4	3.7
Chama Divide	2/28	20	4.6	4.4	3.0
Chamita	2/28	38	9.5	9.3	7.3
Rio Grande					
Big Tesuque	2/26	28	7.3	8.6	4.9
Bluebird Mesa	NS	--	---	4.3	4.0
Cordova	2/26	38	10.6	9.6	9.6
Elk Cabin	2/27	23	5.8	6.2	3.1
Hopewell	2/26	54	16.2	15.7	---
La Cueva	2/24	31	7.0	6.2	---
Pajarito Peak	2/27	6	1.8	1.4	1.2
Payrole	2/26	40	11.2	8.1	7.8
Quemazon	2/26	45	11.0	8.1	7.8
Rio En Medio	2/26	38	9.9	11.7	8.0
Sandoval	2/26	28	7.2	4.4	4.5
Taos Canyon	2/25	27	7.3	5.6	3.8
Teakettle	2/26	37	10.0	8.3	---
Tres Ritos	2/25	27	6.4	5.2	4.6
Red River					
Hematite Park (B)	2/24	20	5.3	4.7	3.5
Red River	2/24	24	7.2	5.6	5.0

NOTE: NS - No Syrvey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of MARCH 1, 1975

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	2/27	45	12.9	10.8	10.0
Lemon	2/28	39	10.7	7.4	---
Mineral Creek	2/27	54	17.1	10.6	12.9
Molas Lake	2/27	44	13.1	11.1	11.2
Purgatory	2/27	69	20.6	12.4	---
Red Mt. Pass (B)	2/27	88	29.5	21.6	25.4
Silverton Sub-Sta.	2/27	36	10.4	7.3	6.7
Spud Mountain	2/27	75	24.5	16.7	19.7
Dolores River					
Lizard Head	2/28	55	17.5	15.1	13.9
Lone Cone	2/27	52	15.8	16.5	---
Rico	2/28	31	8.9	8.3	7.2
Telluride	2/28	35	9.5	8.7	6.7
Trout Lake	2/28	52	15.5	13.4	11.8
San Juan River					
Chama Divide (B)	2/28	20	4.6	4.4	3.0
Chamita (B)	2/28	38	9.5	9.3	7.3
Upper San Juan	2/27	93	29.2	24.4	24.5
Wolf Creek Pass (B)	2/27	74	22.3	21.6	22.0
Wolf Creek Summit	2/27	92	27.5	20.7	22.5
GUNNISON BASIN					
Gunnison River					
Alexander Lake	2/27	58	18.5	16.7	17.4
Blue Mesa	2/28	35	9.4	9.5	6.9
Butte	2/27	47	13.0	19.2	---
Cochetopa Pass (B)	2/25	32	7.5	5.4	4.8
Crested Butte	2/27	47	12.9	15.0	10.3
Keystone	2/26	62	19.0	19.2	16.7
Lake City	2/24	35	7.9	6.6	7.0
McClure Pass	2/26	49	15.2	15.7	14.7
Mesa Lakes (B)	2/27	53	14.3	15.7	13.5
Park Cone	2/26	36	8.5	8.7	8.8
Park Reservoir	2/27	62	18.3	17.3	19.5
Porphyry Creek	2/27	58	17.8	16.1	13.7
Tomichi	2/27	47	13.9	14.0	10.5
Surface Creek					
Alexander Lake	2/27	58	18.5	16.7	17.4
Mesa Lakes (B)	2/27	53	14.3	15.7	13.5
Park Reservoir	2/27	62	18.3	17.3	19.5
Uncompahgre River					
Ironton Park	2/28	55	17.9	16.0	11.3
Red Mountain Pass	2/27	88	29.5	21.6	25.4
Telluride (B)	2/28	35	9.5	8.7	6.7
COLORADO BASIN					
Blue River					
Blue River	2/25	34	8.6	7.7	7.4
Fremont Pass	2/26	47	13.4	13.2	12.9
Frisco	2/25	31	8.0	5.6	6.4
Grizzly Peak	2/25	53	15.1	15.3	14.6
Hoosier Pass (B)	2/25	48	12.9	9.8	10.6
Shrine Pass	2/25	57	15.3	15.2	14.5
Snake River	2/25	29	6.1	8.0	7.0
Summit Ranch	2/27	25	6.4	7.5	7.0

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTEN (INCHES): LAST YEAR	PAST RECORD: WATER CONTEN (INCHES): AVG 58-72
Colorado River					
Arrow	2/28	40	10.8	14.0	10.5
Berthoud Pass	2/27	46	14.1	15.7	12.8
Berthoud Summit	2/26	59	16.8	17.5	15.4
Cooper Hill	2/26	39	9.7	10.2	9.0
Fiddler Gulch	NS	--	---	---	14.0
Glenmar Ranch	2/26	30	8.4	10.0	7.0
Gore Pass	2/27	38	10.8	8.2	8.6
Grand Lake	2/23	34	8.3	9.3	7.0
Lake Irene	2/23	62	17.3	19.0	19.0
Lapland	2/26	33	9.3	10.1	9.0
Lulu	2/26	56	17.1	18.9	14.9
Lynx Pass	2/27	45	12.6	9.3	10.5
McKenzie Gulch	2/26	29	5.4	7.5	5.5
Middle Fork	2/26	31	8.5	10.2	8.1
Milner	2/23	43	11.4	11.8	---
North Inlet	2/25	31	7.3	9.0	7.6
Pando	2/25	35	8.3	8.2	8.2
Phantom Valley	2/23	38	10.7	9.2	9.3
Ranch Creek	2/28	31	7.7	11.6	7.8
Tennessee Pass (B)	2/27	37	9.6	6.6	8.7
Vail Pass	2/25	52	13.2	14.6	14.5
Vasquez	2/26	38	10.0	13.4	10.2
Roaring Fork River					
Aspen	2/25	52	14.7	15.7	14.0
Independence Pass	2/24	51	14.5	10.6	13.9
Ivanhoe	2/24	54	15.6	18.4	13.9
Kiln	2/24	44	11.5	13.3	---
Lift	2/25	46	13.3	13.7	13.6
McClure Pass	2/26	49	15.2	15.7	14.7
Nast	2/24	29	7.2	8.5	5.5
North Lost Trail	2/25	48	14.2	15.6	13.3
Williams Fork River					
Glenmar Ranch	2/26	30	8.4	10.0	7.0
Jones Pass	2/27	47	13.4	15.7	11.9
Middle Fork	2/26	31	8.5	10.2	8.1
Willow Creek					
Granby	2/26	26	6.9	8.2	6.5
Willow Creek Pass	2/26	38	10.2	11.4	10.4
Plateau Creek					
Mesa Lakes	2/27	53	14.3	15.7	13.5
Park Reservoir	2/27	62	18.3	17.3	19.5
Trickle Divide	2/27	66	20.4	19.9	21.0
YAMPA BASIN					
Elk River					
Elk River	2/27	52	15.4	17.5	15.9
Hahn's Peak	2/27	49	13.6	14.2	---
Yampa River					
Buffalo Pass	NS	--	---	40.9	---
Columbine Lodge (B)	2/27	73	24.2	23.5	20.4
Dry Lake	2/26	60	18.9	22.0	17.8
Lynx Pass (B)	2/27	45	12.6	9.3	10.5
Rabbit Ears	2/27	74	24.5	25.9	21.8
Yampa View	2/27	51	16.1	17.1	13.0
White River					
Burro Mountain	2/26	55	18.6	14.3	15.0
Rio Blanco	2/25	48	14.7	14.4	13.1

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of MARCH 1, 1975

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	10/11/74	11.1	6.2	8.5	6.6
Willow Pass	2/26/75	9.5	4.8	6.1	6.9
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	10/01/74	6.9	3.1	3.1	3.8
Big Thompson River					
Beaver Dam	10/01/74	7.1	3.6	3.3	4.1
Guard Station	10/01/74	6.9	3.2	2.9	4.8
Two Mile	10/01/74	9.1	4.4	4.5	5.5
Clear Creek					
Clear Creek	1/03/75	9.5	5.3	7.1	6.8
Hoop Creek	2/27/75	4.9	2.7	2.4	2.9
Cache La Poudre River					
Feather	2/26/75	10.1	4.4	5.1	4.7
Laramie Road	2/27/75	12.4	6.6	7.4	7.8
South Platte River					
Hoosier Pass	2/25/75	7.8	4.4	5.5	4.9
Kenosha Pass	10/08/74	4.4	2.4	3.3	2.6
ARKANSAS BASIN					
Arkansas River					
Garfield	9/27/74	6.7	3.6	5.2	4.0
Leadville	9/30/74	7.8	3.5	4.1	4.1
Twin Lakes Tunnel	9/30/74	4.5	1.5	2.2	2.1
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	11/13/74	10.7	5.4	4.7	5.3
Rio Grande					
Bristol View	11/14/74	6.1	2.5	2.3	4.0
La Veta	11/13/74	11.9	5.1	6.4	7.6
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	No Report	6.7	---	2.7	2.5
Chamita	2/28/75	8.0	0.9	4.4	2.6
Rio Grande					
Aqua Piedra	2/26/75	7.2	4.6	5.2	3.6
Big Tesuque	2/25/75	3.7	0.8	2.0	1.6
Rio En Medio	2/25/75	3.5	0.5	1.6	1.4
Taos Canyon	2/25/75	3.3	2.1	2.1	2.2
Red River					
Red River Summit	2/24/75	4.8	1.6	1.5	2.1

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of MARCH 1, 1975

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	No Report	9.1	---	3.8	6.0
Mineral Creek	No Report	5.7	---	2.9	3.4
Molas Lake	No Report	9.4	---	7.1	4.8
Dolores River					
Dolores	10/30/74	19.6	5.1	2.0	7.7
Lizard Head	2/28/75	11.8	1.8	1.2	6.9
Rico	2/28/75	13.8	5.4	1.4	9.6
GUNNISON BASIN					
Gunnison River					
King	9/27/74	3.3	2.0	2.6	2.0
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	2/25/75	4.2	2.2	3.3	2.8
Colorado River					
Berthoud Pass	2/27/75	3.9	2.8	3.2	2.8
Gore	2/27/75	4.9	2.3	2.4	3.1
Grand Mesa	No Report	12.5	---	11.3	10.3
Ranch Creek	2/28/75	8.7	5.3	4.9	5.8
Vail	Destroyed	12.3	---	7.1	7.0
Roaring Fork River					
Placita	12/30/74	9.3	3.7	4.4	5.5
YAMPA BASIN					
Yampa River					
Hahn's Peak	2/27/75	13.1	7.7	8.6	8.4

ALL PROFILES 4 FEET DEEP

GPO 858-385

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE
Collaborating with
COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
APR. 1, 1975

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Cabins near Sacajawea Snow Course in Bridger Mountains, Montana.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA SCS PORTLAND OREG 1974

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

M. D. BURDICK
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

MARION E. STRONG
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN
DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS
STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER
STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
and
JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansos, Fremont, Custer County Divide, Fountain Valley, Block Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservotion Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes woter supply canditions in Yampa, Moffat, West Routt, East Routt, North Pork, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes woter supply conditions in Sedgwick, South Plotte, Haxton, Peetz, Padroni, Morgon, Rock Creek,ond Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1975

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
APRIL 1, 1975

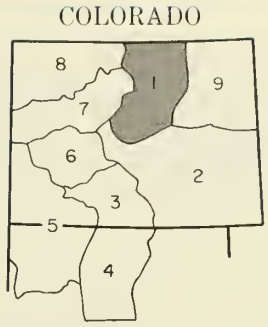
TWO LARGE SNOW STORMS STRUCK BOTH COLORADO AND NEW MEXICO NEAR THE END OF MARCH. THESE STORMS LEFT CONSIDERABLE SNOW IN THEIR WAKE, PARTICULARLY ALONG THE STATE LINE. SNOW ON THE WOLF CREEK AND RED MOUNTAIN PASSES PILED UP AS MUCH AS THREE FEET IN A SHORT PERIOD OF TIME. HIGH WATER IS LIKELY IN THE RIO GRANDE AND SAN JUAN BASINS IN COLORADO AND NEW MEXICO. SPRING TEMPERATURES, PRECIPITATION, AND APRIL AND MAY SNOWFALL AT THE HIGHER ELEVATIONS WILL DETERMINE THE HEIGHT OF THE PEAK RUNOFF. SOIL MOISTURE CONDITIONS ARE GENERALLY GOOD.

COLORADO -- STREAMFLOW FORECASTS IN THE SOUTHERN THIRD OF COLORADO INDICATE POTENTIAL HIGH WATER IF CLIMATIC CONDITIONS ARE RIGHT THIS SPRING. FLOWS IN CENTRAL COLORADO WILL BE ABOVE NORMAL AND IN THE NORTHERN THIRD AT LEAST ADEQUATE. SOIL MOISTURE ON THE PLAINS WAS GREATLY IMPROVED BY THE MONTH-END STORMS. CARRYOVER STORAGE IN THE SOUTH PLATTE AREA IS GOOD, IN THE ARKANSAS DRAINAGE POOR. SNOW CAN BE EXPECTED IN THE HIGH MOUNTAINS FOR ANOTHER MONTH.

NEW MEXICO -- MONTH-END STORMS ADDED A CONSIDERABLE AMOUNT OF SNOW TO THE RIO GRANDE AND SAN JUAN BASINS. HIGH WATER IS PROBABLE IN MOST OF THE AREAS WHERE PAST FLOODING HAS OCCURED. FLOWS SHOULD BE SIMILAR TO THOSE IN 1957 AND 1965. NOT ONLY DOES NEW MEXICO HAVE A CONSIDERABLE SNOWPACK BUT AREAS IN COLORADO THAT CONTRIBUTE TO NEW MEXICO STREAMFLOW ALSO HAVE HIGH SNOW. SOIL MOISTURE CONDITIONS ARE GENERALLY GOOD. CARRYOVER STORAGE IS NEAR NORMAL.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of
APRIL 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75% - 100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

THE WATER SUPPLY OUTLOOK WAS GREATLY IMPROVED BY MONTH-END STORMS. THE SNOWPACK IS NOW ABOVE NORMAL AND SUMMER FLOWS SHOULD BE GOOD. FORECASTS RANGE FROM 103% TO 114% ON THE NORTHERN TRIBUTARIES. VALLEY SOILS ARE IN FAIRLY GOOD CONDITION. IF THE SNOWFALL CONTINUES AT A NORMAL RATE WATER SUPPLIES SHOULD BE AT LEAST NORMAL OR BETTER.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A. MOSS – AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

RODNEY M. ALT – AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Big Thompson at Drake(1)	110	103	107
Boulder at Orodell	55	112	49
Cache La Poudre at Canyon Mouth (2)	255	103	247
Clear Creek at Golden(3)	145	114	127
St. Vrain at Lyons (4)	80	107	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Avg.
Coal Creek	Exc.	Avg.
North Fork of South Platte	Exc.	Avg.
North Fork of Cache La Poudre	Exc.	Avg.
Ralston Creek	Exc.	Avg.
Rock Creek	Exc.	Avg.

(1) Observed flow plus by–pass to power plants. (2) Observed flow minus trans–basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	99	106
Boulder	3	92	106
Cache La Poudre	8	94	104
Clear Creek	6	109	117
Saint Vrain	3	101	110
South Platte	3	153	137

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	3	114	105
Boulder	1	131	114
Cache La Poudre	2	86	98
Clear Creek	1	104	104
Saint Vrain	1	131	114
South Platte	1	110	102

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33	16	16	14
Barr Lake	32	29	26	25
Black Hollow	8	5	5	4
Boyd Lake	44	37	44	38
Cache La Poudre	10	7	8	8
Carter Lake	109	107	101	95
Chambers Lake	9	4	4	3
Cheeseman	79	44	55	59
Cobb Lake	34	17	19	15
Eleven Mile	98	97	97	88
Fossil Creek	12	8	9	8
Gross	43	19	30	28

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Halligan	6	6	6	5
Horsetooth	144	103	121	111
Lake Loveland	14	10	12	10
Lone Tree	9	6	8	7
Mariano	5	5	5	5
Marshall	10	7	8	5
Marston	18	16	16	15
Milton	24	15	17	14
Standley	42	32	35	19
Terry Lake	8	6	6	5
Union	13	12	13	10
Windsor	19	12	12	12

† 1958–1972 period.

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"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

WATER SUPPLY OUTLOOK WAS AGAIN IMPROVED BY THE MONTH-END STORMS. MUCH ABOVE AVERAGE SNOW FELL OVER THE ENTIRE BASIN. THE SNOWPACK IS NOW FROM 140% TO 180% OF THE 15 YEAR AVERAGE. SUMMER STREAMFLOW SHOULD BE CONSIDERABLY ABOVE NORMAL. CARRYOVER STORAGE IS POOR. FORECASTS ARE BASED ON NORMAL CLIMATIC CONDITIONS FOR THE REMAINDER OF THE YEAR.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A. MOSS – AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

D. W. GILLASPIE – AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	440	152	290
Arkansas at Salida (1)	450	144	313
Cucharas nr La Veta	14	140	10
Purgatoire at Trinidad	55	145	38

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Exc.	Exc.
Fountain Creek	Exc.	Exc.
Grape	Exc.	Exc.
Hardscrable Creek	Exc.	Exc.
Huerfano	Exc.	Exc.
Monument Creek	Exc.	Exc.

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	123	141
Cucharas	1	130	181
Purgatoire	1	149	161

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	2	105	110
Cucharas and Purgatoire	1	68	46

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	62	0	20	17
Clear Creek	11	2	4	8
Cucharas	40	0	7	3
Great Plains	150	0	51	61
Horse Creek	27	0	0	7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	354	8	29	91
Meredith	42	0	27	14
Model	15	0	7	4
Turquoise	121	38	49	--
Twin Lakes	58	16	36	26

+ 1958-1972 period.

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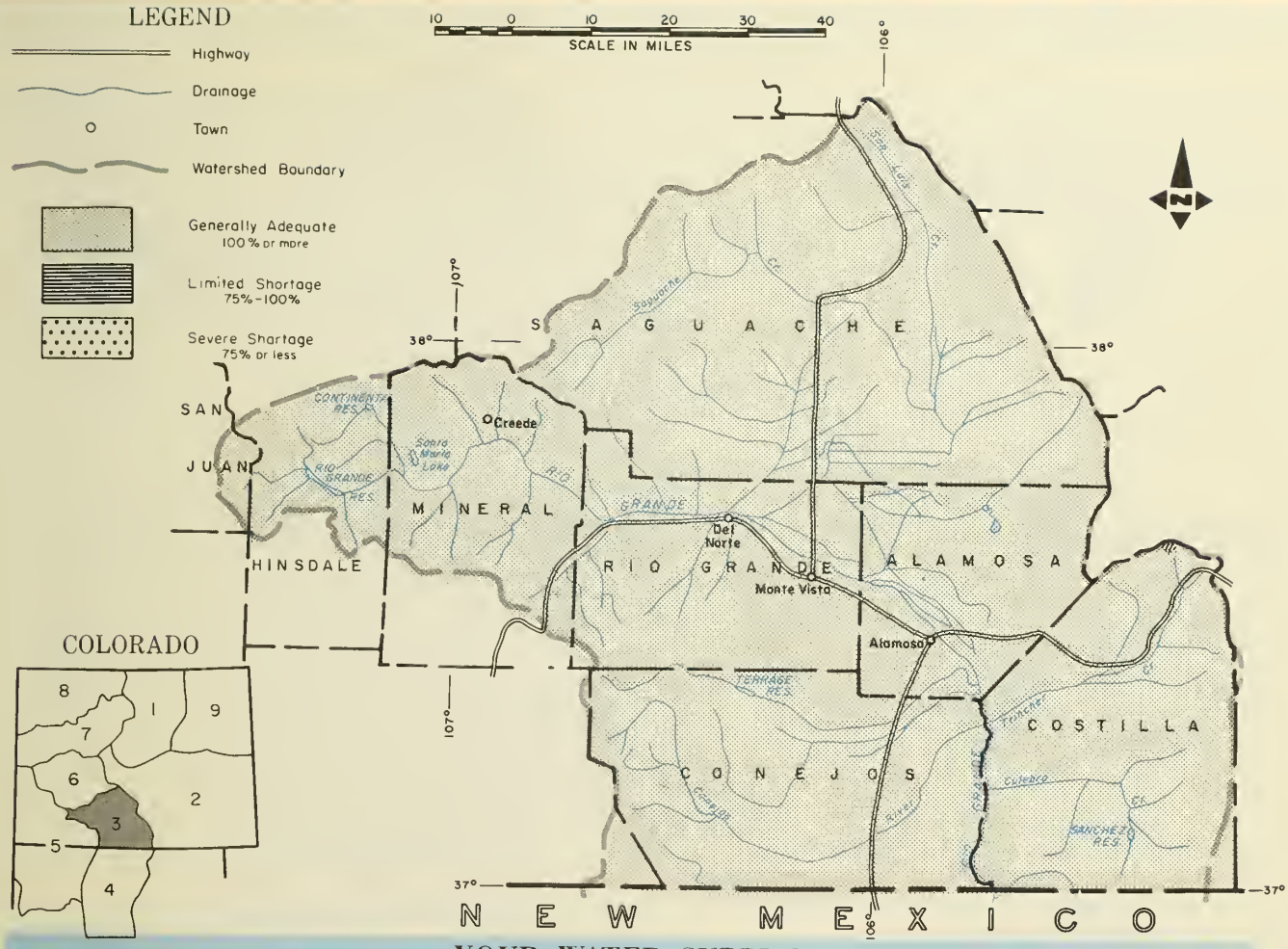
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

APRIL 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

LATE MARCH SNOWFALL WAS MUCH ABOVE NORMAL. A NUMBER OF LOW ELEVATION SNOW COURSES ARE NEAR A MAXIMUM OF RECORD . SNOW AT HIGH ELEVATION SNOW COURSES ARE SIMILAR TO 1957 AND 1965. SNOME HIGH WATER CAN BE EXPECTED. MUCH WILL DEPEND UPON THE EARLY SUMMER TEMPERATURES AND THE SNOWFALL DURING APRIL. CARRYOVER STORAGE IS SLIGHTLY BELOW NORMAL. FORECASTS ARE BASED ON NORMAL CLIMATIC CONDITIONS FOR THE REMAINDER OF THE YEAR.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

D. W. GILLASPIE – AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Alamosa abv Terrace	100	161	62
Conejos nr Mogote (1)	265	144	184
Culebra at San Luis (2)	27	159	17
Rio Grande at 30 Mile Bridge (3)	165	136	121
Rio Gr. nr Del Norte(3)	725	155	468
South Fork at South Fork	180	156	115

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Exc.	Exc.
Sangre de Cristo Cr.	Exc.	Exc.
Trinchera	Exc.	Exc.

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Alamosa	2	178	151
Conejos	3	156	145
Culebra	4	149	165
Rio Grande	10	192	159

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Alamosa	1	47	58
Conejos	1	84	75
Culebra	1	69	46
Rio Grande	2	63	47

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Continental	27	3	3	6
Platoro	60	19	36	9
Rio Grande	46	9	28	18

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Sanchez	103	7	16	14
Santa Maria	45	4	8	7
Terrace	18	5	10	6

† 1958-1972 period.

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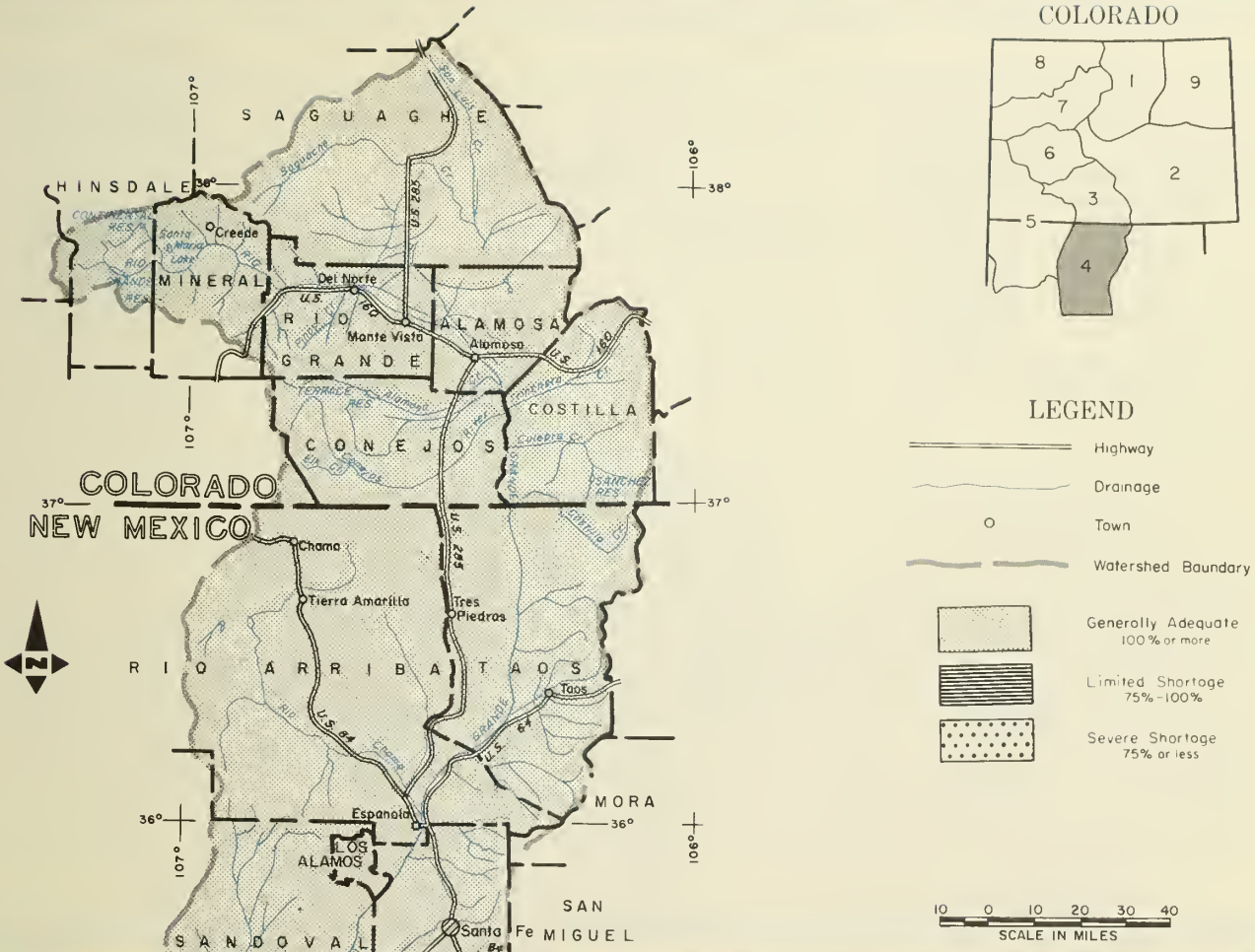
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

APRIL 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SUMMER STREAMFLOW IN NEW MEXICO SHOULD BE MUCH ABOVE NORMAL. SOME HIGH WATER CAN BE EXPECTED IN LOW AREAS. THE PEAK WILL DEPEND UPON SPRING TEMPERATURES, APRIL SNOW, AND EARLY SUMMER PRECIPITATION. FLOWS SIMILAR TO 1957 AND 1965 CAN BE EXPECTED. SOILS ARE GENERALLY IN GOOD CONDITION. CARRYOVER STORAGE IS NEAR NORMAL.

This report prepared by

JACK N. WASHICHER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

MARION E. STRONG – STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

JAMES E. TATUM – AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Costilla(1)	29	150	19
Jemez River nr Jemez	50	172	29
Pecos at Pecos	60	146	41
Red River at Mouth nr Questa	43	148	29
Rio Chama at El Vado	330	174	190
Rio Gr. at Otowi (2)	925	175	526
Rio Gr. at San Mar (2)	610	171	355
Rio Hondo nr Valdez	22	157	14
Santa Cruz at Cundiyo	18	150	13

The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Exc.	Exc.
Mora River	Exc.	Exc.
Nambe Creek	Exc.	Exc.
Rio Ojo Caliante	Exc.	Exc.
Rio Pueblo de Taos	Exc.	Exc.
Santa Fe Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	315	205
Rio Chama	5	250	206
Rio Grande, NM	11	168	169
Rio Hondo	1	--	--
Red River	2	172	168

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	1	125	36
Rio Chama	2	62	47
Rio Grande	4	124	69
Red River	1	62	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamogordo	111	48	72	63
Caballo	344	42	70	65
Conchas	273	132	172	184
Elephant Butte	2195	445	794	394

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
El Vado	195	95	128	6
McMillan-Avalon		45	30	21

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

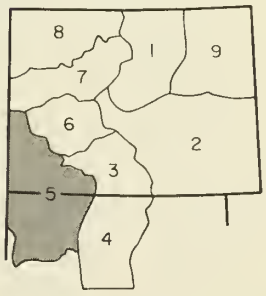
as of
APRIL 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

COLORADO



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SCALE IN MILES

YOUR WATER SUPPLY

STREAMFLOW SHOULD BE MUCH ABOVE NORMAL THIS SUMMER. HIGH WATER CAN BE EXPECTED ON ALL THE STREAMS IN SOUTHWESTERN COLORADO. THE EXTENT OF HIGH WATER WILL DEPEND UPON SPRING TEMPERATURES, SNOW DURING APRIL, AND SPRING PRECIPITATION. CURRENT SNOWPACK IS 150% TO 170% OF NORMAL WITH A MONTH OF POSSIBLE SNOWFALL LEFT.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

MARION E. STRONG – STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

D. W. GILLASPIE – AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E. TATUM – AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	650	154	423
Dolores at Dolores	375	162	232
La Plata at Hesperus	40	167	24
Los Pinos at Bayfield(1)	300	152	198
Piedra Cr. at Arboles	315	170	185
San Juan at Carracas	575	162	354
San Miguel at Placerville	218	168	130
Inflow to Navajo R.(1&2)	1000	168	597
Mancos nr Towac	41		14

(1) Observed flow plus change in storage in Vallicito Reservoir. (2) April – July

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	199	158
Dolores	4	174	170
San Juan	5	181	162

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	2	56	56
Dolores	3	--	77
San Juan	5	--	72

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	8	15	10
Jackson Gulch	10	3	7	5
Lemon	40	5	19	20
Narraguinnep		12	11	--
Navajo	1036	308	326	227*
Vallecito	126	30	73	57

*Less than 15 yrs.

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO
as of
APRIL 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

SUMMER STREAMFLOW ON THE GUNNISON AND ITS TRIBUTARIES SHOULD BE MORE THAN ADEQUATE FOR ITS MANY USES. ALL STREAMFLOWS ARE BEING FORECAST ABOVE NORMAL. THE UNCOMPAHGRE SHOULD EXCEED 150% OF THE 15 YEAR AVERAGE FLOW. SPRING CLIMATIC PATTERNS WILL REGULATE THE PEAK. CARRYOVER STORAGE IS NORMAL.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Gunnison inflow to Blue Mesa (1)	1075	136	793
Gunnison nr Grand Junction (2)	1650	139	1184
N. Fork of Gunnison(3)	275	105	263
Surface Creek nr Cedaredge	20	125	16
Uncompahgre at Colona	220	164	134

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Taylor	Exc.	Exc.

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Gunnison	12	132	133
Surface Creek	3	139	123
Uncompahgre	3	164	164

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Gunnison	1	81	116
Surface Creek	–	--	--
Uncompahgre	–	--	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Blue Mesa	830	336	262	315
Morrow Point	121	115	115	114
Taylor	106	50	63	65

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †

† 1958-1972 period.

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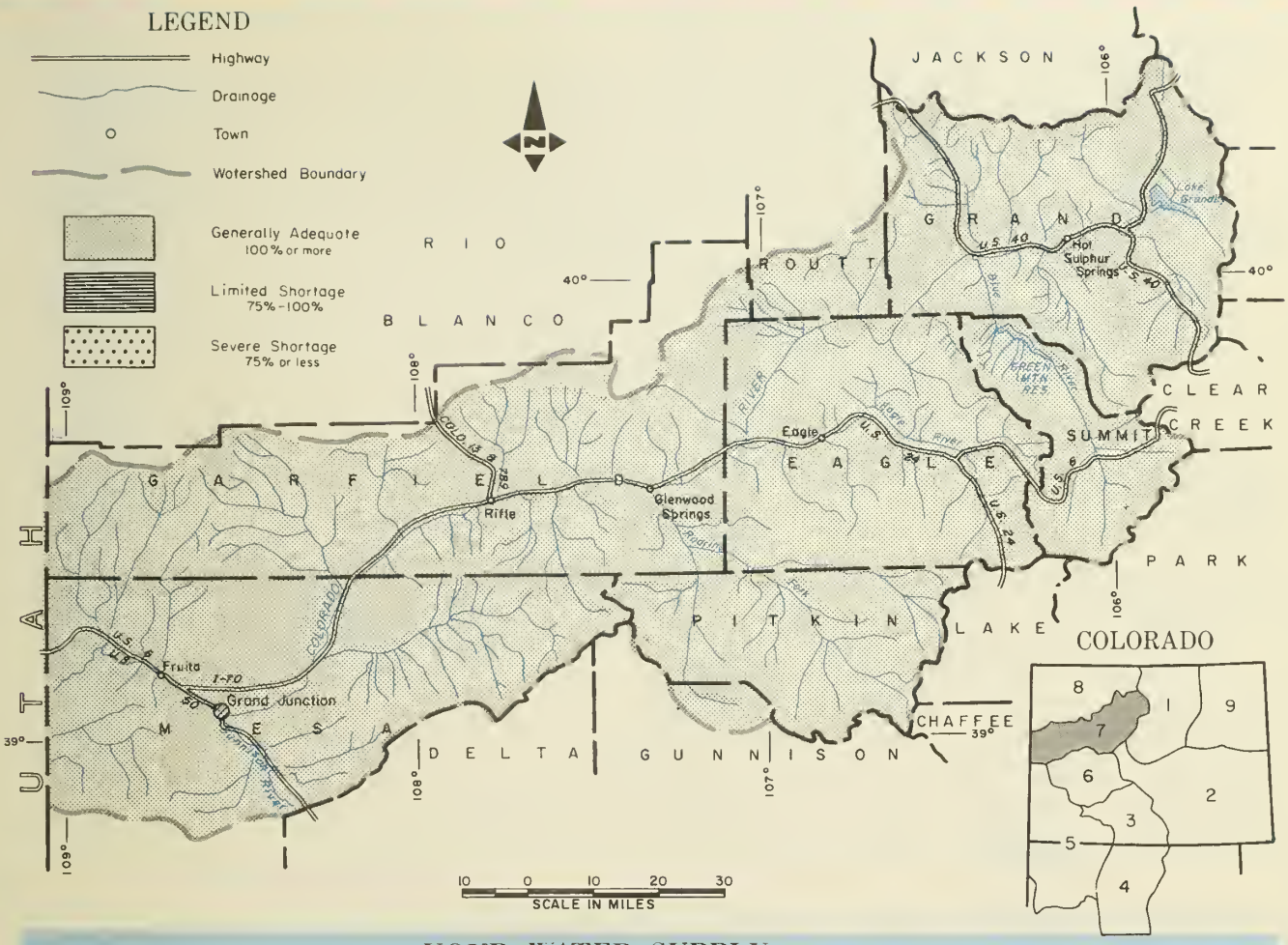
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
APRIL 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE COLORADO RIVER AND ITS TRIBUTARIES SHOULD PROVIDE ADEQUATE WATER SUPPLIES TO ALL WATER USERS THIS SUMMER. THE SNOWPACK IS CONSIDERABLY ABOVE NORMAL AND THERE IS STILL ANOTHER MONTH OF POSSIBLE SNOW INCREASE REMAINING. STREAMFLOW FORECASTS RANGE FROM A LOW OF 103% OF NORMAL ON THE UPPER COLORADO TO 133% ON THE ROARING FORK. CARRYOVER STORAGE IS ABOVE NORMAL. FORECASTS ARE BASED ON NORMAL CLIMATIC CONDITIONS FOR THE REMAINDER OF THE YEAR.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue inflow to Dillon	190	112	169
Blue inflow to Green Mountain (1)	325	109	297
Colo. R. inflow to Granby Res. (2)	235	103	228
Colo. R. nr Dotsero (3)	1700	119	1434
Roaring Fork at Glenwood Springs (4)	950	133	713
Wm. Fk. nr Parshall (5)	72	114	63
Willow Cr. inflow to Willow Cr. Res.	52	111	47
Colorado nr Cameo (6)	2800	118	2370

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (5).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	110	121
Colorado	21	97	111
Plateau	3	135	123
Roaring Fork	7	132	134
Williams Fork	3	90	112
Willow	2	96	109

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	96	96
Colorado	3	91	100
Roaring Fork	1	64	70
Willow	1	98	79

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	209	239	231
Granby	466	288	371	213
Green Mountain	147	62	54	54
Homestake	43	33	21	15

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	54	57	59
Vega	32	6	15	12
Williams Fork	97	34	42	25
Willow Creek	9	7	6	6

+ 1958–1972 period.

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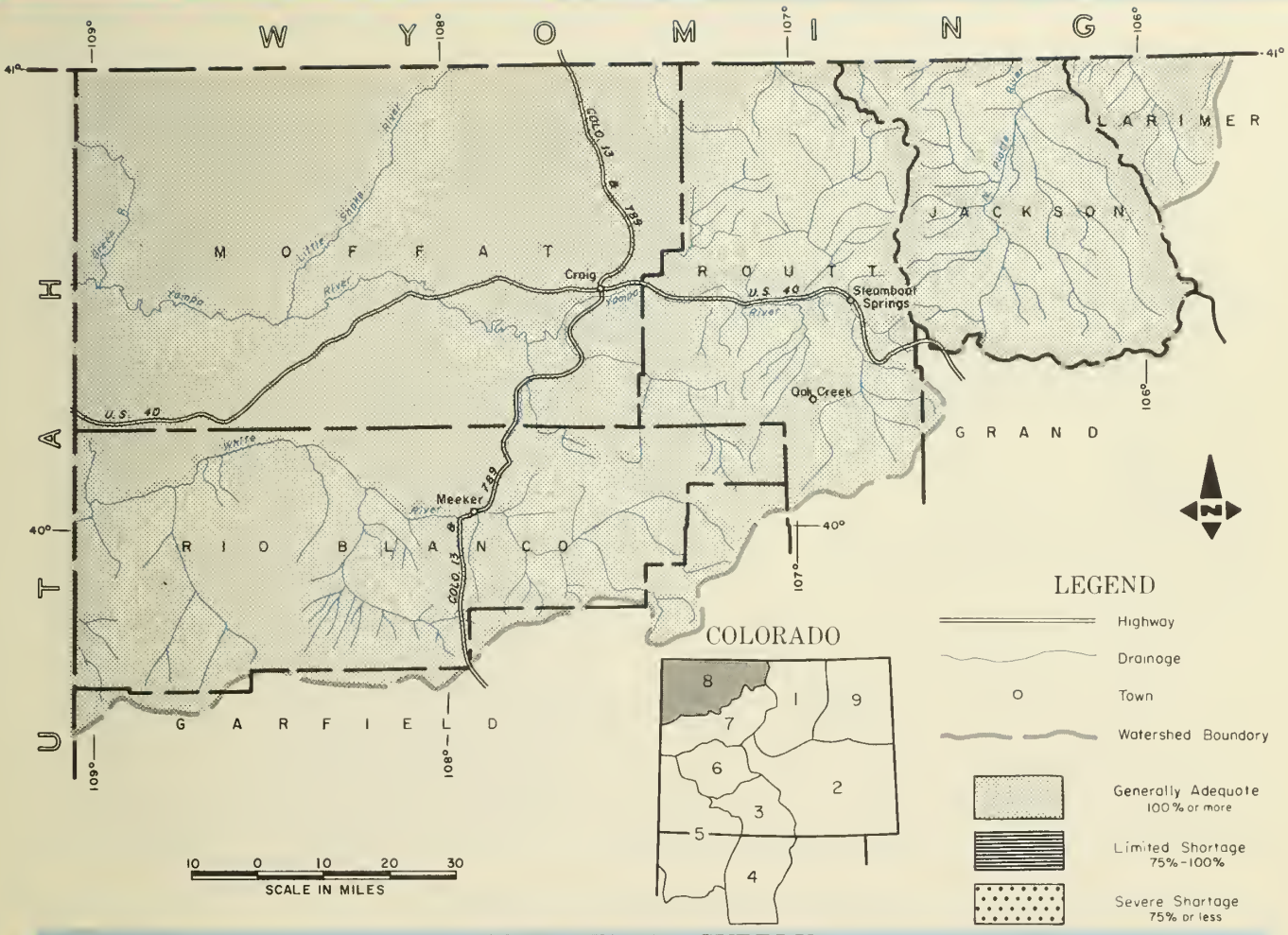
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

APRIL 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES SHOULD BE ADEQUATE IN NORTHWESTERN COLORADO. ALL STREAM BASINS HAVE ABOVE NORMAL SNOWPACKS. ALL STREAMS SHOULD FLOW BETTER THAN NORMAL. MOUNTAIN SOILS HAVE NEAR NORMAL SOIL MOISTURE AND VALLEY SOILS ARE REPORTED TO BE IN GOOD CONDITION. SOME HIGH WATER MAY BE EXPECTED IN LOW AREAS IF SPRING TEMPERATURES ARE CONSIDERABLE ABOVE NORMAL. ADDITIONAL SNOW CAN FALL DURING APRIL.

This report prepared by

JACK N. WASHICHER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	240	121	198
Laramie nr Woods	144	113	127
Little Snake at Lily	360	111	324
N. Platte at Northgate	300	125	240
White nr Meeker	365	124	295
Yampa nr Maybell	1150	127	905
Yampa at Steamboat Springs	345	126	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Exc.	Exc.
Hunt Creek	Exc.	Exc.
Illinois River	Exc.	Exc.
Michigan River	Exc.	Exc.
Oak Creek	Exc.	Exc.
Trout Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Elk	2	114	124
Laramie	3	80	94
North Platte	5	101	113
White	2	124	122
Yampa	8	102	121

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Laramie	1	95	100
North Platte	2	92	90
Yampa	1	75	97

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

MONTH-END SNOWS IMPROVED THE SNOWPACK MATERIALLY, ESPECIALLY ON THE HEAD WATERS OF THE SOUTH PLATTE. THE SOUTH PLATTE SHOULD FLOW MUCH ABOVE NORMAL WHILE THE NORTHERN TRIBUTARIES SHOULD FLOW AT LEAST NORMAL. PLAINS SNOWFALL ALSO WAS UP AND IMPROVED THE SOIL MOISTURE CONDITIONS. CARRYOVER STORAGE IS EXACTLY NORMAL AND WILL PROVIDE GOOD SUPPLEMENTAL SUPPLIES. FORECASTS ARE BASED ON NORMAL CLIMATIC CONDITIONS FOR THE REMAINDER OF THE YEAR.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M. ALT – AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	110	103	107
Boulder at Orodell	55	112	49
Cache La Poudre at Canyon Mouth (2)	225	103	247
Clear Cr. at Golden (3)	145	114	127
Saint Vrain at Lyons (4)	80	107	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Exc.	Avg.
South Platte from Fort Morgan to Sterling	Exc.	Avg.
South Platte below Sterling	Exc.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	99	106
Boulder	3	92	106
Cache La Poudre	8	94	104
Clear Creek	6	109	117
Saint Vrain	3	101	110
South Platte	3	153	137

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	114	105
Boulder	1	131	114
Cache La Poudre	2	86	98
Clear Creek	1	104	104
Saint Vrain	1	131	114
South Platte	1	110	102

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	109	107	101	95
Cheeseman	79	44	55	59
Eleven Mile	98	97	97	88
Empire	38	32	27	33
Horsetooth	144	103	121	111

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35	32	33	34
Julesburg	28	23	20	22
Point of Rocks	70	71	70	66
Prewitt	33	27	26	23
Riverside	58	52	58	58

+ 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of APRIL 1, 1975

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	3/31	50	14.2	18.7	16.8
McIntyre	3/28	41	11.1	12.2	10.8
Roach	3/28	61	17.8	22.8	18.2
North Platte River					
Cameron Pass	3/31	83	31.9	30.8	28.7
Columbine Lodge	3/31	84	29.5	27.6	24.0
Northgate	3/26	22	5.8	8.0	6.5
Park View	3/27	47	10.7	10.8	9.2
Willow Cr. Pass (B)	3/27	56	14.0	13.8	12.7
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	3/28	29	7.7	8.7	6.8
Boulder Falls	Est.		14.0	15.5	13.4
University Camp	Est.		20.0	21.0	19.3
Big Thompson River					
Deer Ridge	3/28	25	5.2	4.8	4.8
Hidden Valley	3/28	48	10.1	10.2	10.5
Lake Irene (B)	3/24	69	21.6	22.8	20.9
Long's Peak	3/28	55	13.5	13.2	10.9
Two Mile	3/27	59	15.3	15.5	15.1
Cache La Poudre					
Bennett Creek	3/29	27	6.4	9.8	---
Big South	3/28	10	2.6	0.0	2.1
Cameron Pass	3/31	83	31.9	30.8	28.7
Chambers Lake	3/28	37	12.1	10.8	9.6
Deadman Hill	3/31	50	14.2	18.7	16.8
Hourglass Lake	3/29	29	6.6	10.0	6.7
Joe Wright	3/31	77	26.6	26.5	---
Lost Lake	3/28	46	12.9	13.1	11.8
Pine Creek	3/31	10	1.4	1.6	1.9
Red Feather	3/31	25	6.3	9.0	6.9
Clear Creek					
Baltimore (B)	3/28	29	7.7	8.7	6.8
Berthoud Falls	3/28	58	17.4	16.4	13.6
Empire	3/28	40	10.4	9.9	7.8
Grizzly Peak (B)	3/27	70	22.3	19.2	18.9
Loveland Lift	3/27	69	20.8	17.3	21.1
Loveland Pass	3/27	59	19.6	18.8	15.7
St. Vrain River					
Copeland Lake	3/27	24	6.3	4.2	4.4
Ward	3/26	25	5.9	6.5	6.5
Wild Basin	3/29	46	12.2	13.3	11.2
South Platte River					
Como	3/31	36	8.9	5.2	---
Geneva Park	3/28	25	5.0	3.1	3.8
Horseshoe Mt.	3/28	61	16.2	9.8	---
Hoosier Pass	3/28	59	17.5	13.0	12.9
Jefferson Creek	3/31	46	12.9	7.1	9.2
Mosquito	3/28	53	14.2	8.3	---
Trout Creek Pass	3/27	30	6.7	5.5	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	3/28	34	9.5	10.8	6.5
Cooper Hill (B)	3/28	54	14.4	14.1	11.3
East Fork	3/26	42	12.3	11.3	9.8
Four Mile Park	3/29	35	10.4	5.3	5.1
Fremont Pass	3/26	62	18.2	17.5	16.2
Garfield	3/27	65	19.9	14.5	13.0
Hermit Lake	3/25	48	16.1	9.6	---
Monarch Pass	3/27	78	24.4	18.4	17.1
Twin Lakes Tunnel	3/31	45	14.8	11.6	10.7
Westcliffe	3/25	40	13.2	9.0	6.3
Tennessee Pass	3/29	48	13.5	9.7	10.6

NOTE: NS - No Survey
(B) - On adjacent drainage

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTEN (INCHES): LAST YEAR	PAST RECORD: WATER CONTEN (INCHES): AVG. 58-72
Cucharas River					
Apishapa	3/28	36	10.6	10.2	---
Cucharas Creek	3/28	43	12.9	---	---
La Veta Pass (B)	3/28	45	13.4	10.3	7.4
Purgatoire River					
Bourbon	3/27	41	11.3	7.6	7.0
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	3/26	44	10.3	1.7	5.3
Summitville	3/27	99	25.8	18.5	18.6
Conejos River					
Cumbres	3/31	84	24.5	19.3	18.0
La Manga	3/31	90	27.6	18.4	---
Platoro	3/30	83	22.4	13.7	16.3
River Springs	3/31	35	9.4	3.0	4.6
Culebra River					
Brown Cabin	3/29	41	12.2	4.1	---
Cottonwood (B)	NS			---	---
Culebra	3/26	47	12.6	7.2	8.4
La Veta Pass (B)	3/28	45	13.4	10.3	7.4
Trinchera (B)	3/28	44	10.5	7.4	---
Rio Grande					
Cochetopa Pass	3/26	38	9.6	6.8	5.9
Grayback	3/27	81	21.7	15.6	---
Hiway	3/31	111	34.7	20.6	23.8
Lake Humphrey	3/28	47	10.8	3.8	6.1
Love Lake	3/31	53	14.3	6.3	---
Pass Creek	3/31	62	18.2	9.5	9.8
Pool Table	3/31	33	6.4	4.0	6.1
Porcupine	3/28	63	16.7	6.3	10.5
Santa Maria	3/29	40	10.6	1.5	3.6
Upper Rio Grande	3/30	52	14.2	4.6	7.5
Wolf Creek Pass	3/31	115	39.4	22.6	25.5
Wolf Cr. Summit (B)	3/31	130	41.6	25.8	28.3
RIO GRANDE BASIN - NM					
Pecos River					
Panchuela	4/01	14	4.1	1.3	2.0
Rio Chama					
Bateman	3/26	52	17.1	10.2	11.7
Capulin	3/28	25	7.2	2.0	2.7
Capulin Peak	3/28	27	7.5	3.0	3.4
Chama Divide	3/27	24	6.7	0.0	1.7
Chamita	3/28	57	16.4	6.9	7.2
Rio Grande					
Big Tesuque	3/26	25	8.8	4.5	4.6
Bluebird Mesa	Dropped			1.1	3.5
Cordova	3/25	42	11.5	9.7	10.1
Elk Cabin	3/27	17	3.6	4.3	2.5
Hopewell	3/25	64	20.5	17.7	---
La Cueva	3/31	32	10.7	4.1	---
Pajarito	3/27	2	0.2	0.0	0.0
Pajarito Peak	3/27	7	2.1	0.0	0.3
Payrole	3/28	47	13.6	6.3	6.8
Quemazon	3/27	53	14.4	9.3	9.0
Rio En Medio	3/26	36	12.4	9.7	7.4
Sandoval	3/28	29	8.6	3.6	4.2
Taos Canyon	3/26	29	7.4	4.3	3.9
Teakettle	3/26	40	12.8	8.1	---
Tres Ritos	3/25	24	8.0	2.2	4.8
Rio Hondo					
Taos Powderhorn	3/27	102	32.1	19.8	---
Red River					
Hematite Park (B)	3/24	23	6.1	2.9	3.5
Red River	3/24	30	9.2	6.0	5.6
Red River #2	3/26	31	9.1	4.7	---

APPENDIX I

SNOW COURSE MEASUREMENTS as of APRIL 1, 1975

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	3/28	67	19.5	8.1	10.2
Lemon	3/31	52	16.0	4.1	---
Mineral Creek	3/28	77	24.6	11.8	15.4
Molas Lake	3/28	65	20.0	10.7	12.6
Purgatory	3/28	109	31.1	13.9	---
Red Mt. Pass (B)	3/28	125	41.5	25.3	31.5
Silverton Sub-Sta.	3/28	46	13.5	5.5	5.2
Spud Mountain	3/28	120	36.1	16.8	23.1
Dolores River					
Lizard Head	3/31	75	25.8	16.3	17.2
Lone Cone	3/31	66	22.1	16.8	---
Rico	3/31	40	12.2	4.4	6.1
Telluride	3/28	52	13.5	7.3	6.5
Trout Lake	3/28	73	22.6	14.5	13.7
San Juan River					
Chama Divide (B)	3/27	24	6.7	0.0	1.7
Chamita (B)	3/28	56	16.4	6.9	7.2
Upper San Juan	3/31	127	43.5	26.1	28.6
Wolf Cr. Pass (B)	3/31	115	39.4	22.6	25.5
Wolf Cr. Summit	3/31	130	41.6	25.8	28.3
GUNNISON BASIN					
Gunnison River					
Alexander Lake	3/28	83	26.5	19.2	22.8
Blue Mesa	3/31	44	11.7	8.6	7.2
Butte	3/28	60	17.9	15.6	---
Cochetopa Pass (B)	3/26	38	9.6	6.8	5.9
Crested Butte	3/26	60	18.0	16.2	13.0
Keystone	3/27	81	25.3	21.1	20.0
Lake City	3/25	41	10.7	8.0	8.0
Mesa Lakes (B)	3/28	71	22.5	16.1	17.6
McClure Pass	3/31	67	22.6	13.9	15.1
Park Cone	3/25	47	12.7	9.7	10.6
Park Reservoir	3/28	95	30.1	21.6	23.8
Porphyry Creek	3/27	80	22.6	18.4	16.9
Tomichi	3/27	65	18.2	15.4	12.6
Surface Creek					
Alexander Lake	3/28	83	26.5	19.2	22.8
Mesa Lakes	3/28	71	22.5	16.1	17.6
Park Reservoir	3/28	95	30.1	21.6	23.8
Uncompahgre River					
Ironton Park	3/31	67	23.7	15.6	10.2
Red Mountain Pass	3/28	125	41.9	25.3	31.5
Telluride (B)	3/28	52	13.5	7.3	6.5
COLORADO BASIN					
Blue River					
Blue River	3/28	42	10.8	9.4	8.5
Fremont Pass	3/26	62	18.2	17.5	16.2
Frisco	3/27	37	10.6	7.4	7.4
Grizzly Peak	3/27	70	22.3	19.2	18.9
Hoosier Pass (B)	3/28	59	17.5	13.0	12.9
Shrine Pass	3/26	69	20.9	20.6	18.1
Snake River	3/27	33	8.7	10.0	7.9
Summit Ranch	3/28	34	8.5	9.5	7.1

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
Colorado River					
Arrow	3/28	46	16.2	17.8	13.2
Berthoud Pass	3/26	52	15.9	21.0	15.9
Berthoud Summit	3/28	65	19.2	21.5	19.7
Cooper Hill	3/28	54	14.4	14.1	11.3
Fiddler Gulch	3/31	59	16.6	15.0	14.5
Glenmar Ranch	3/27	40	10.4	11.7	8.5
Gore Pass	3/28	43	13.4	10.3	10.2
Grand Lake	3/24	37	8.8	10.0	8.2
Lake Irene	3/24	69	21.6	22.8	20.9
Lapland	3/27	42	11.3	12.8	10.4
Lulu	3/30	66	21.6	22.9	18.7
Lynx Pass	3/28	53	16.8	12.7	12.8
McKenzie Gulch	3/27	40	9.2	5.8	5.0
Middle Fork	3/27	39	10.9	11.6	9.9
Milner	3/24	46	12.6	13.7	13.6
North Inlet	3/25	33	8.6	8.7	8.7
Pando	3/26	48	13.1	10.3	10.3
Phantom Valley	3/24	41	10.3	9.3	10.8
Ranch Creek	3/28	38	9.2	13.5	9.9
Tennessee Pass (B)	3/29	48	13.5	9.7	10.6
Vail Pass	3/26	64	18.6	19.8	17.3
Vasquez	3/27	48	12.8	16.4	12.9
Roaring Fork					
Aspen	3/28	72	21.4	19.9	17.1
Independence Pass	3/31	65	20.2	14.0	17.5
Ivanhoe	3/28	70	21.7	22.4	18.1
Kiln	3/28	59	16.8	16.8	---
Lift	3/28	61	26.3	16.0	17.8
McClure Pass	3/31	67	22.6	15.0	15.1
Nast	3/28	36	9.9	8.0	5.6
North Lost Trail	3/31	60	19.8	12.4	14.6
Williams Fork River					
Glenmar Ranch	3/27	40	10.4	11.7	8.5
Jones Pass	3/26	56	16.7	19.1	15.5
Middle Fork	3/27	39	10.9	11.6	9.9
Willow Creek					
Granby	3/27	30	8.1	9.2	7.5
Willow Cr. Pass	3/27	56	14.0	13.8	12.7
Plateau Creek					
Mesa Lakes	3/28	71	22.5	16.1	17.6
Park Reservoir	3/28	95	30.1	21.6	23.8
Trickle Divide	3/28	95	30.2	23.8	25.9
YAMPA BASIN					
Elk River					
Elk River	3/27	70	21.2	19.3	17.8
Hahn's Peak	3/27	57	17.9	15.1	13.7
White River					
Burro Mountain	3/27	69	21.9	15.5	17.2
Rio Blanco	3/26	55	18.3	17.0	15.7
Yampa River					
Bear River	3/28	53	13.7	11.9	11.2
Fish Creek	3/26	135	44.9	46.6	---
Columbine (B)	3/31	84	29.5	27.6	24.0
Crosho	3/28	57	16.5	15.4	---
Dry Lake	3/26	69	23.1	24.6	20.0
Lynx Pass (B)	3/28	53	16.8	12.7	12.8
Rabbit Ears	3/31	87	30.0	31.9	25.9
Yampa View	3/31	57	18.4	20.0	14.6
Tower	3/26	152	54.5	54.0	---

NOTE: NS - No Survey
(B) - On adjacent drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1975

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	3/31	11.1	6.7	7.6	6.6
Willow Pass	3/27	9.5	5.3	5.4	6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	3/25	6.9	4.2	3.2	3.7
Big Thompson River					
Beaver Dam	3/28	7.1	3.8	3.4	3.5
Guard Station	3/28	6.9	3.1	3.0	3.6
Two Mile	3/28	9.1	5.6	4.6	4.8
Clear Creek					
Clear Creek	3/27	9.5	2.5	5.6	5.4
Hoop Creek	3/26	4.9	2.7	2.6	2.6
Cache La Poudre River					
Feather	3/31	10.1	4.3	5.7	4.5
Laramie Road	3/28	12.4	6.9	7.3	6.9
South Platte River					
Hoosier Pass	3/28	7.8	4.5	4.1	4.4
Kenosha Pass	3/31	4.4	2.1	---	2.2
ARKANSAS BASIN					
Arkansas River					
Garfield	No Reading	6.7	---	4.9	3.6
Leadville	3/26	7.8	3.9	3.6	3.6
Twin Lakes Tunnel	3/26	4.5	2.6	2.6	2.3
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	3/24	10.7	4.6	5.5	6.1
Rio Grande					
Bristol View	3/31	6.1	2.1	4.4	3.6
La Veta Pass	3/28	11.9	4.0	5.8	8.7
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	3/26	6.7	2.0	1.8	3.1
Chamita	3/28	8.0	2.0	4.6	5.4
Rio Grande					
Aqua Piedra	3/26	7.2	3.6	1.4	4.5
Big Tesuque	3/26	3.7	0.9	1.7	2.2
Rio En Medio	3/26	3.5	0.5	0.4	1.4
Taos Canyon	3/26	3.3	2.2	2.3	2.3
Red River					
Red River Summit	3/24	4.9	1.5	2.4	---

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1975

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	No Reading	9.1	---	3.6	6.0
Mineral Creek	3/07	5.7	2.7	3.2	3.2
Molas Lake	3/07	9.4	1.4	4.1	4.1
Dolores River					
Dolores	3/31	19.6	8.8	---	8.6
Lizard Head	3/31	11.8	3.8	---	5.4
Rico	3/31	13.8	5.0	---	8.8
GUNNISON BASIN					
Gunnison River					
King	3/27	3.3	2.2	2.7	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	3/28	4.2	2.4	2.5	2.5
Colorado River					
Berthoud Pass	3/27	3.9	2.7	2.7	2.6
Gore	3/28	4.9	2.4	2.5	2.7
Grand Mesa	Inoperative	12.5	---	8.5	9.9
Ranch Creek	3/28	8.7	5.6	6.5	5.3
Vail	No Reading	12.3	---	8.0	8.5
Roaring Fork River					
Placita	3/31	9.3	4.7	7.4	6.7
YAMPA BASIN					
Yampa River					
Hahn's Peak	3/27	13.1	7.6	10.1	7.8

ALL PROFILES 4 FEET DEEP

GPO 858-932

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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Collaborating with
COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
MAY 1, 1975

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Cabins near Sacajawea Snow Course in Bridger Mountains, Montana.

SCS PHOTO 1 -P48C-15

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA SCS PORTLAND, OREG. 1974

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

M. D. BURDICK

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

MARION E. STRONG

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN

DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor

and

JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

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WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

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APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

MAY 1, 1975

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
MAY 1, 1975

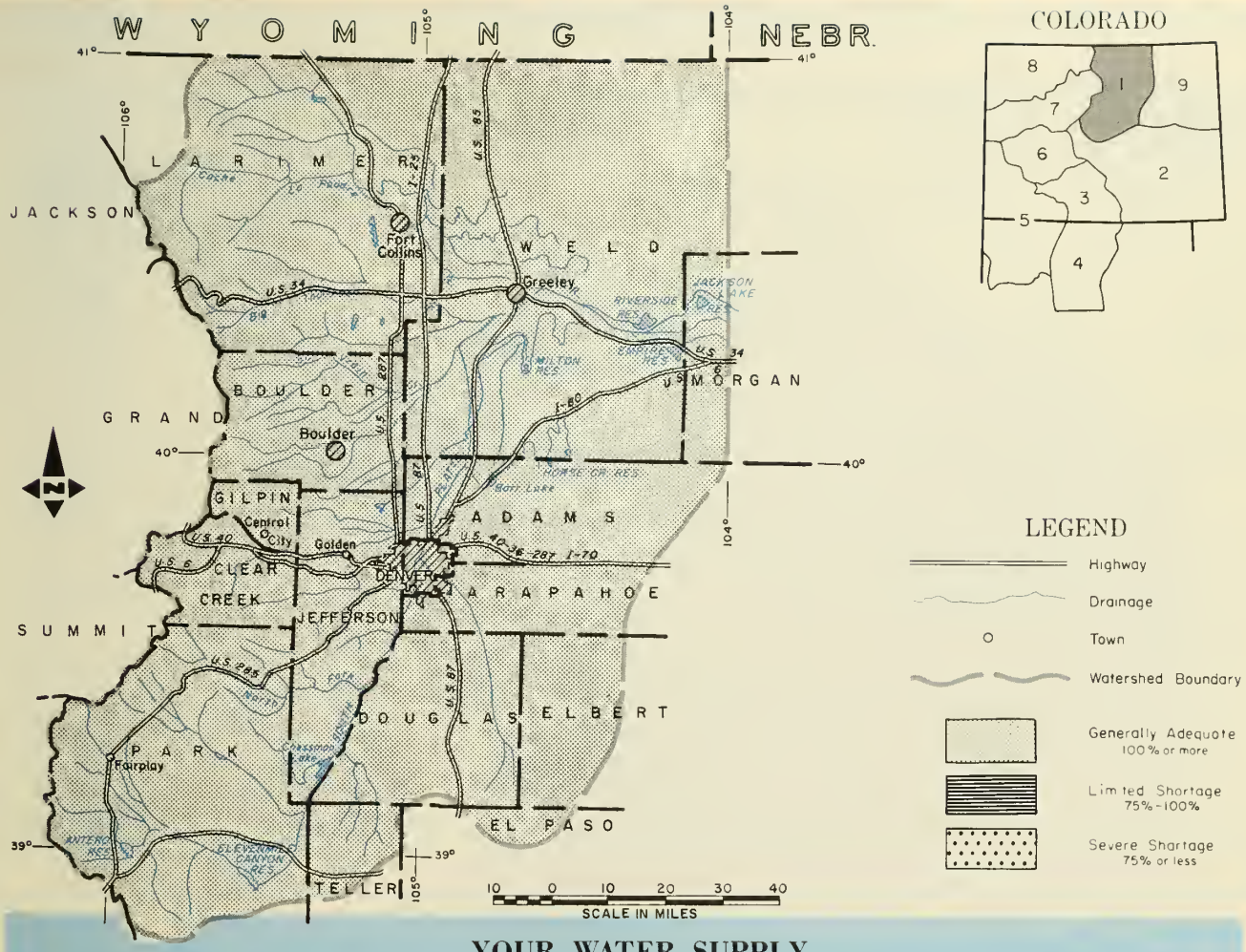
WATER SUPPLIES SHOULD BE ADEQUATE IN BOTH STATES THIS SUMMER. NORTHERN NEW MEXICO AND SOUTHERN COLORADO STREAMS COULD PRODUCE HIGH WATER. FORECASTS RANGE ABOVE 150% AND THE SNOWPACK INDICATES FLOWS SHOULD BE HIGHER THAN 1973. SOME SNOW COURSES HAVE RECORD AMOUNTS OF WATER AT PRESENT TIME. PLAINS AREAS OF NEW MEXICO AND COLORADO INDICATE POOR SOIL MOISTURE CONDITIONS WHILE IRRIGATED AREAS SEEM TO BE IN RELATIVELY GOOD CONDITION. FORECASTS ARE BASED ON NORMAL CONDITIONS FOR THE REMAINDER OF THE YEAR. IF THE NEXT 60 DAYS HAVE EXTREMELY HIGH TEMPERATURES OR PRECIPITATION VERY HIGH RUNOFF WILL OCCUR.

COLORADO -- STREAMS IN THE SOUTHERN HALF OF COLORADO SHOULD PRODUCE MUCH ABOVE AVERAGE RUNOFF THIS YEAR. HIGH WATER CAN BE EXPECTED ON ALL LARGE STREAMS AND MINOR TRIBUTARIES. THE SIZE OF THE PEAK WILL DEPEND UPON THE TEMPERATURES AND PRECIPITATION DURING THE NEXT 60 DAYS. THE NORTHERN HALF OF THE STATE WILL HAVE ADEQUATE WATER SUPPLIES FOR ALL PURPOSES. CARRYOVER STORAGE IS GOOD ON THE SOUTH PLATTE DRAINAGE. PLAINS' SOIL MOISTURE IS REPORTED AS FAIR. IRRIGATED AREAS INDICATE FAIR TO GOOD SOIL MOISTURE.

NEW MEXICO -- THE RIO GRANDE AND SAN JUAN BASINS HAVE EXTREMELY HIGH SNOWPACKS. THIS OCCURRED BECAUSE SNOWFALL WAS HEAVY AND THERE HAS BEEN PRACTICALLY NO MELT. STREAMS THAT NORMALLY START TO FLOW THE LATER PART OF MARCH OR EARLY APRIL HAVE NOT PRODUCED MUCH WATER TO DATE. HIGH WATER IS EXPECTED OVER THE ENTIRE AREA. SMALL STREAMS AS WELL AS LARGE WILL PRODUCE HIGH PEAKS IF TEMPERATURES ARE HIGH. FLOWS SHOULD IMPROVE CARRYOVER STORAGE FOR NEXT YEAR AS WELL AS PROVIDE ADEQUATE WATER THIS YEAR.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of
MAY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER PROSPECTS FOR THE IRRIGATION SEASON ARE GOOD. ALL RIVERS ARE BEING FORECAST FOR GREATER THAN NORMAL RUNOFF. THE MOUNTAIN SNOWPACK IS GOOD, BUT PRACTICALLY NO MELT HAS OCCURRED. THE RIVERS ARE STILL LOW. CARRY-OVER STORAGE IS GOOD. SOILS IN THE IRRIGATED AREAS ARE REPORTED TO BE IN GOOD CONDITION.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A. MOSS – AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

RODNEY M. ALT – AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Big Thompson at Drake(1)	120	112	107
Boulder at Orodell	60	122	49
Cache La Poudre at Canyon Mouth (2)	265	107	247
Clear Creek at Golden(3)	150	118	127
St. Vrain at Lyons (4)	92	123	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Avg.
Coal Creek	Exc.	Avg.
North Fork of South Platte	Exc.	Avg.
North Fork of Cache La Poudre	Exc.	Avg.
Ralston Creek	Exc.	Avg.
Rock Creek	Exc.	Avg.

(1) Observed flow plus by–pass to power plants. (2) Observed flow minus trans–basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	112	115
Boulder	3	83	103
Cache La Poudre	8	88	111
Clear Creek	6	85	111
Saint Vrain	3	146	132
South Platte	3	152	142

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	3	89	81
Boulder	1	79	57
Cache La Poudre	2	91	82
Clear Creek	2	104	97
Saint Vrain	1	79	57
South Platte	2	104	88

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33	16	16	14
Barr Lake	32	29	26	26
Black Hollow	8	5	5	4
Boyd Lake	44	36	44	38
Cache La Poudre	10	7	8	9
Carter Lake	109	109	107	99
Chambers Lake	9	4	5	4
Cheesman	79	50	68	60
Cobb Lake	34	17	19	15
Eleven Mile	98	97	95	89
Fossil Creek	12	7	10	8
Gross	43	14	26	23

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Halligan	6	6	6	6
Horsetooth	144	115	126	121
Lake Loveland	14	10	13	10
Lone Tree	9	8	8	8
Mariano	5	5	5	5
Marshall	10	8	9	6
Marston	18	16	17	16
Milton	24	18	17	15
Standley	42	34	36	20
Terry Lake	8	6	6	6
Union	13	12	13	10
Windsor	19	13	13	13

† 1958–1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

MAY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

STREAMFLOW SHOULD BE MUCH ABOVE NORMAL THIS SUMMER. ALL THE TRIBUTARY STREAMS AS WELL AS THE MAINSTEM OF THE ARKANSAS ARE BEING FORECAST TO FLOW AT LEAST 50% MORE THAN NORMAL. ALL OTHER CONDITIONS ON THE ARKANSAS ARE POOR. CARRYOVER STORAGE IS ALMOST NON-EXISTENT AND SOIL MOISTURE IN THE PLAINS IS LISTED AS POOR TO FAIR.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A. MOSS - AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

D. W. GILLASPIE - AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	450	155	290
Arkansas at Salida (1)	470	150	313
Cucharas nr La Veta	15	150	10
Purgatoire at Trinidad	60	158	38

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Exc.	Exc.
Fountain Creek	Exc.	Exc.
Grape	Exc.	Exc.
Hardscrable	Exc.	Exc.
Huerfano	Exc.	Exc.
Monument Creek	Exc.	Exc.

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	143	168
Cucharas	2	--	241
Purgatoire	1	--	292

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	91	95
Cucharas and Purgatoire	-	--	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	62	0	19	16
Clear Creek	11	0	4	8
Cucharas	40	0	6	3
Great Plains	150	0	50	57
Horse Creek	27	0	0	7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	354	0	0	73
Meredith	42	0	26	13
Model	15	0	0	3
Turquoise	121	34	52	--
Twin Lakes	58	13	36	22

+ 1958-1972 period.

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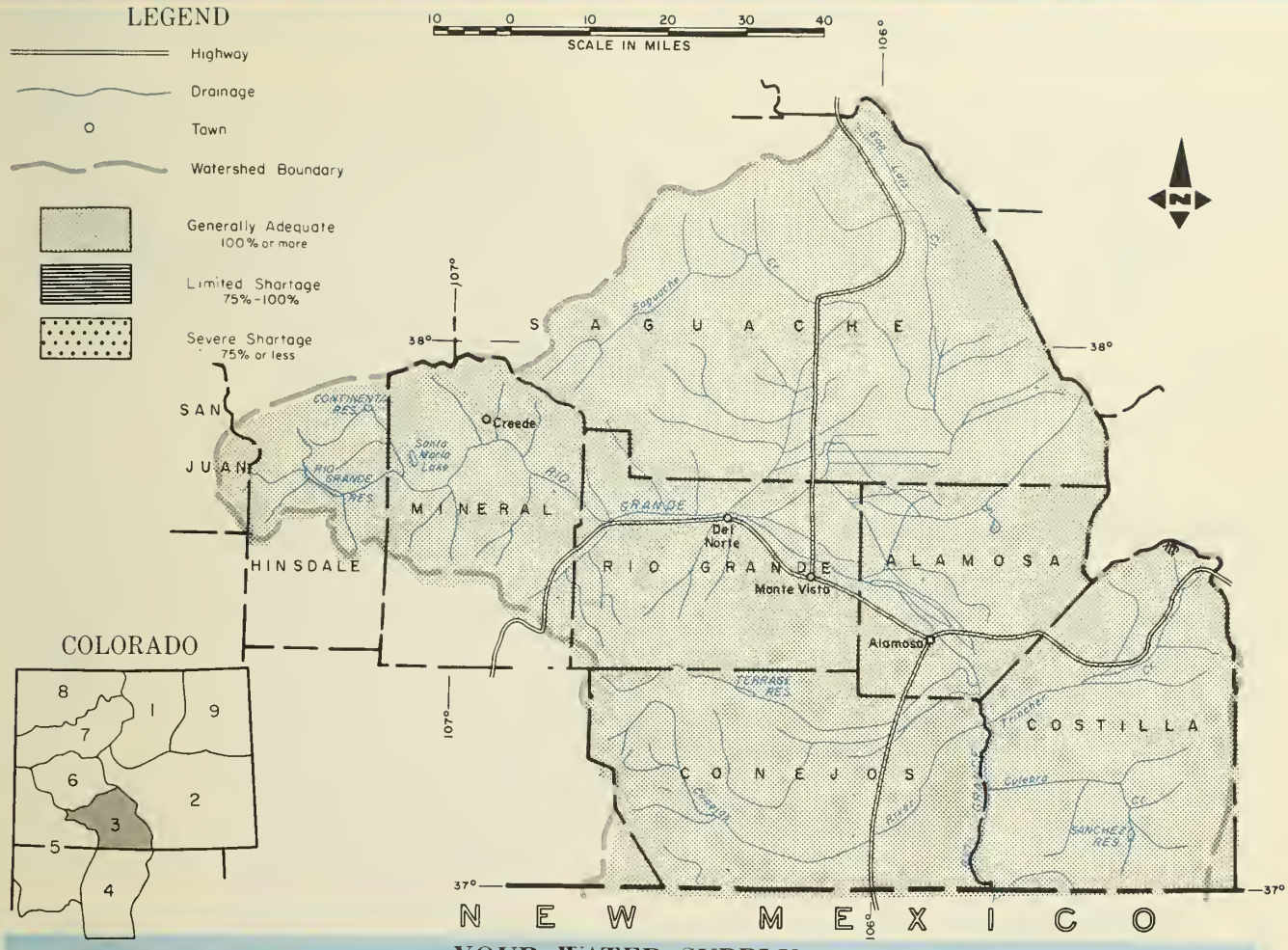
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

MAY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SOME HIGH WATER IS EXPECTED IN THE SAN LUIS VALLEY THIS SUMMER. STREAMS ARE BEING FORECAST WELL ABOVE THE 150% LEVEL. THE EXTENT OF FLOODING WILL DEPEND UPON THE DAY AND NIGHT TIME TEMPERATURES AND PRECIPITATION DURING THE NEXT 60 DAYS. EXTREMES OF EITHER COULD PRODUCE VERY HIGH WATER. LITTLE SNOW-MELT HAS OCCURRED SO THE SNOWPACK IS NEAR A RECORD HIGH.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

D. W. GILLASPIE – AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Alamosa abv Terrace	115	185	62
Conejos nr Mogote (1)	285	155	184
Culebra at San Luis (2)	30	176	17
Rio Grande at 30 Mile Bridge (3)	200	165	121
Rio Gr. nr Del Norte(3)	800	171	468
South Fork at South Fork	185	161	115

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Exc.	Exc.
Sangre de Cristo Cr.	Exc.	Exc.
Trinchera	Exc.	Exc.

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Alamosa	2	207	187
Conejos	2	264	218
Culebra	2	336	280
Rio Grande	10	274	212

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Alamosa	1	40	43
Conejos	1	77	74
Culebra	-	--	--
Rio Grande	1	39	43

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Continental	27	4	4	7
Platoro	60	19	35	10
Rio Grande	46	10	29	20

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Sanchez	103	7	-	15
Santa Maria	45	5	8	8
Terrace	18	5	10	7

† 1958-1972 period.

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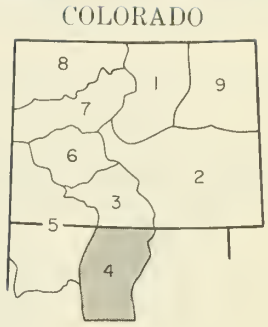
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

MAY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

HIGH WATER CAN BE EXPECTED ALL ALONG THE RIO GRANDE AND ON ALL THE STREAMS NOT CONTROLLED BY A STORAGE FACILITY. SNOWPACK IS A RECORD HIGH ON MANY SNOW COURSES ESPECIALLY IN NEW MEXICO. SEVERAL DAYS OF HIGH DAY AND NIGHT TIME TEMPERATURES AND/OR HIGH PRECIPITATION COULD CAUSE EXTREMELY HIGH WATER. LOW ELEVATION SNOW WILL MELT RAPIDLY.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

MARION E. STRONG – STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

JAMES E. TATUM – AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar–Jul

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Costilla(1)	35	184	19
Jemez River nr Jemez	50	172	29
Pecos at Pecos	65	159	41
Red River at Mouth nr Questa	47	162	29
Rio Chama at El Vado	325	171	190
Rio Gr. at Otowi (2)	1050	200	526
Rio Gr. at San Mar (2)	850	239	355
Rio Hondo nr Valdez	25	179	14
Santa Cruz at Cundiyo	19	158	13

The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Exc.	Exc.
Mora River	Exc.	Exc.
Nambe Creek	Exc.	Exc.
Rio Ojo Caliante	Exc.	Exc.
Rio Pueblo de Taos	Exc.	Exc.
Santa Fe Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Rio Grande	10	274	212

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	52	73	62
Caballo	344	73	78	83
Conchas	273	132	224	175
Elephant Butte	2195	372	719	380

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
El Vado	195	131	131	28
McMillan		15	7	
Avalon		2	1	

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
MAY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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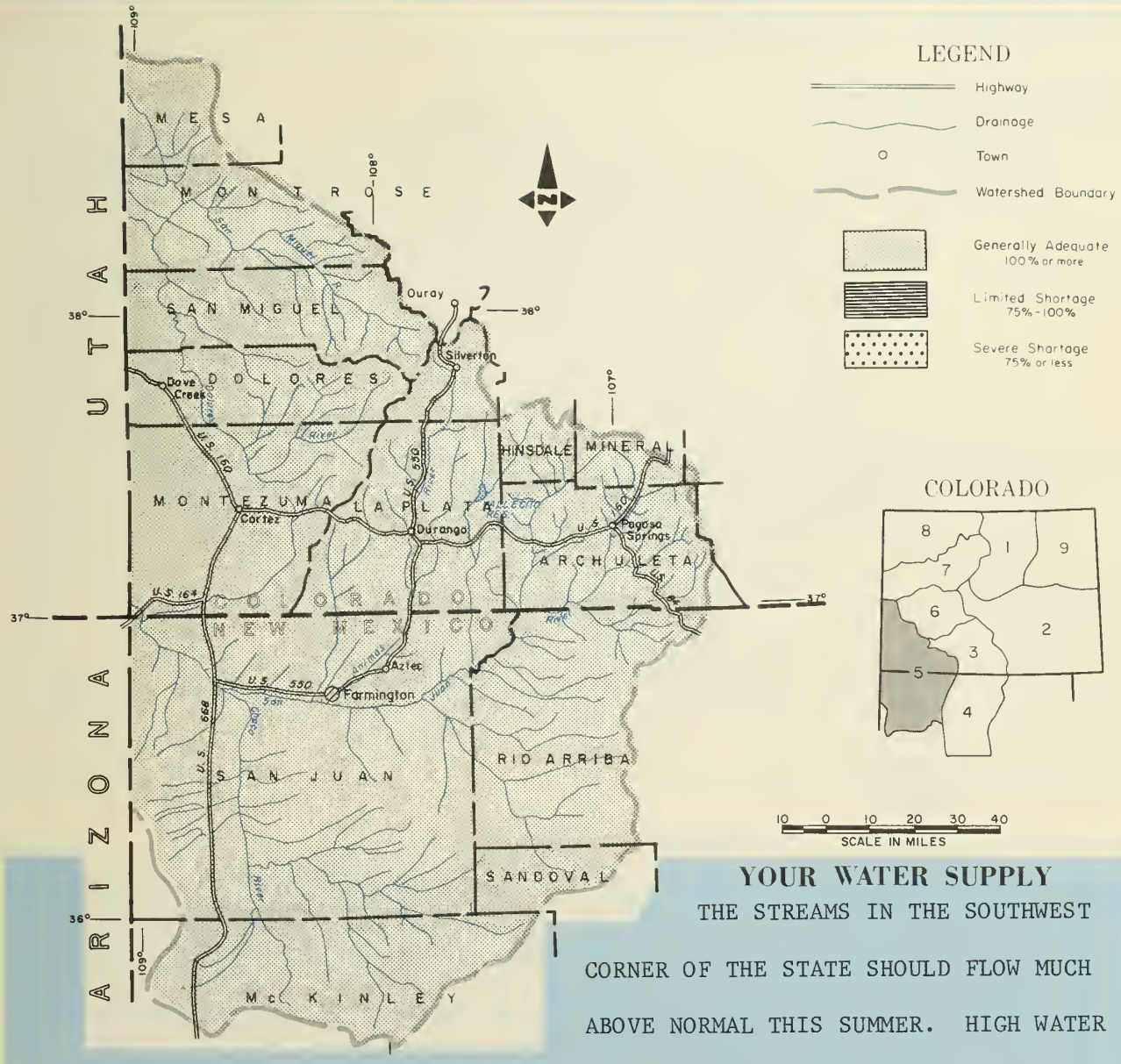

YOUR WATER SUPPLY

THE STREAMS IN THE SOUTHWEST CORNER OF THE STATE SHOULD FLOW MUCH ABOVE NORMAL THIS SUMMER. HIGH WATER WILL OCCUR ON MOST OF THE RIVERS. THE EXTENT OF FLOODING WILL DEPEND UPON DAY AND NIGHT TIME TEMPERATURES AND PRECIPITATION DURING THE NEXT 60 DAYS. HIGH EXTREMES OF EITHER WILL TRIGGER HIGH PEAK FLOWS.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

MARION E. STRONG – STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

D. W. GILLASPIE – AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E. TATUM – AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	735	176	423
Dolores at Dolores	395	170	232
La Plata at Hesperus	43	180	24
Los Pinos at Bayfield(1)	350	177	198
Piedra Cr. at Arboles	340	184	185
San Juan at Carracas	650	184	354
San Miguel at Placerville	230	177	130
Inflow to Navajo R.(1&2)	1100	184	597
Mancos nr Towac	24	171	14

(1) Observed flow plus change in storage in Vallicito Reservoir. (2) April – July

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	239	207
Dolores	4	253	292
San Juan	4	218	181

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	–	--	--
Dolores	3	73	65
San Juan	–	--	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	9	16	12
Jackson Gulch	10	7	7	7
Lemon	40	8	19	25
Narraguinnep	19	18	16	--
Navajo	1036	394	322	284*
Vallecito	126	29	83	68

*Less than 15 yrs.

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

MAY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE GUNNISON RIVER AND ITS TRIBUTARIES SHOULD PROVIDE ADEQUATE WATER FOR ALL ITS USERS THIS SUMMER. THE SNOWPACK IS EXTREMELY HIGH AND FORECASTS RANGE FROM 150% OF NORMAL AND UP. HIGH WATER COULD RESULT ABOVE BLUE MESA RESERVOIR ON THE GUNNISON AND ON THE UNCOMPAHGRE AND SURFACE CREEKS IF TEMPERATURES ARE UP DURING THE NEXT 60 DAYS. BLUE MESA CONTAINS 260,000 A.F. SO CAN SLOW THE FLOW MATERIALLY.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Gunnison inflow to Blue Mesa (1)	1200	151	793
Gunnison nr Grand Junction (2)	2000	169	1184
N. Fork of Gunnison (3)	410	156	263
Surface Creek nr Cedaredge	23	144	16
Uncompahgre at Colona	230	172	134

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Taylor	Exc.	Exc.

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Gunnison	12	144	168
Surface Creek	3	138	143
Uncompahgre	3	195	206

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Gunnison	1	100	100
Surface Creek	-	--	--
Uncompahgre	-	--	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Blue Mesa	830	260	311	308
Morrow Point	121	114	114	115
Taylor	106	50	66	62

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †

† 1958-1972 period.

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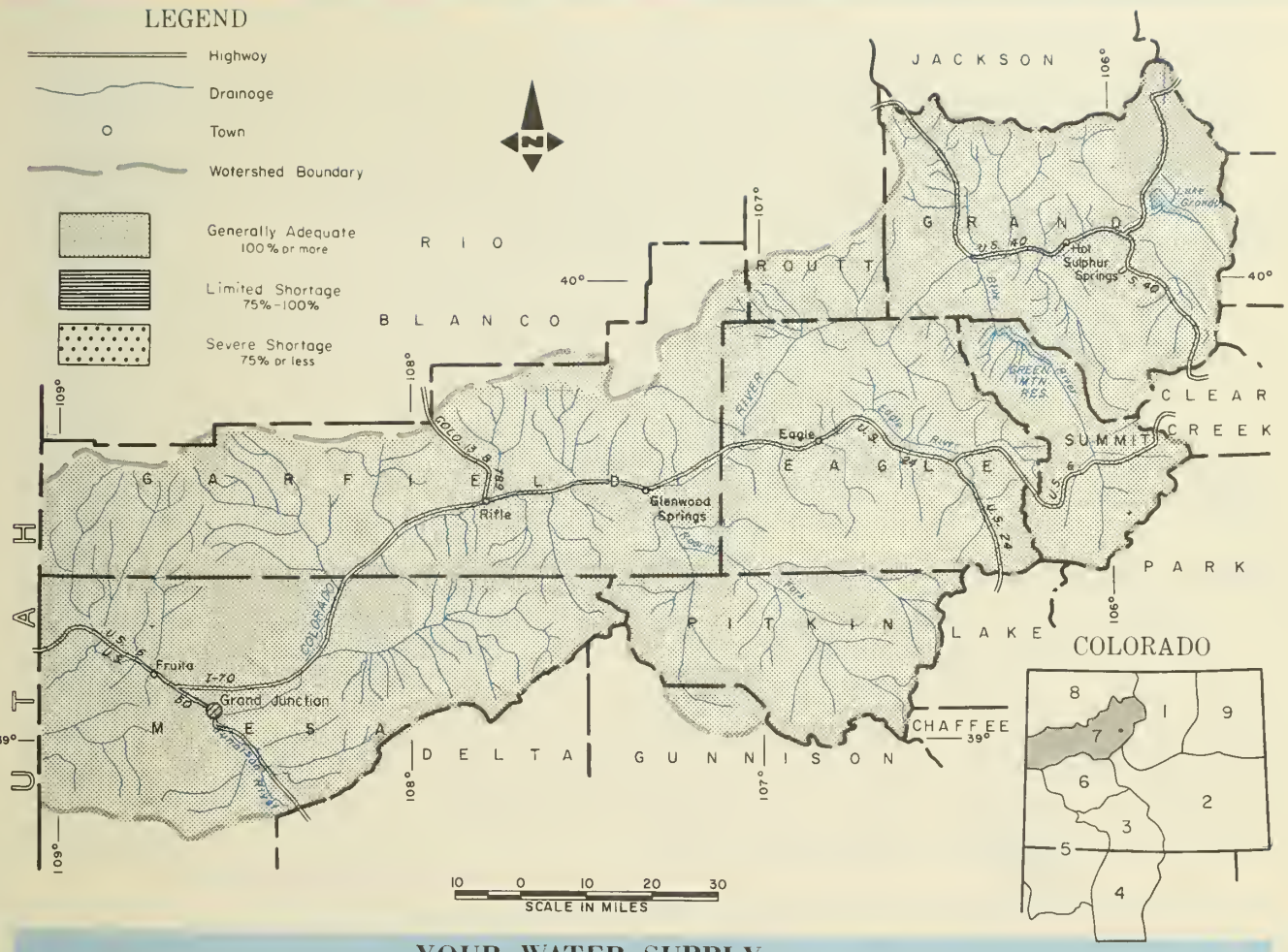
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
MAY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES WILL BE ADEQUATE IN THE COLORADO BASIN THIS SUMMER. FORECASTS RANGE FROM A LOW OF 103% ON THE INFLOW TO GRANBY TO 133% OF NORMAL ON THE ROARING FORK. CARRYOVER STORAGE IS SLIGHTLY ABOVE NORMAL AND WILL PROVIDE AN EXCELLENT SUPPLEMENT IF NEEDED. SOIL MOISTURE CONDITIONS ARE REPORTED AS FAIR TO GOOD.

This report prepared by

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SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

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GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue inflow to Dillon	190	112	169
Blue inflow to Green Mountain (1)	335	113	297
Colo. R. inflow to Granby Res. (2)	235	103	228
Colo. R. nr Dotsero(3)	1750	122	1434
Roaring Fork at Glenwood Springs (4)	950	133	713
Wm. Fk. nr Parshall(5)	75	119	63
Willow Cr. inflow to Willow Cr. Reservoir	55	117	47
Colorado nr Cameo (6)	2900	122	2370

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Exc.
Eagle River	Exc.	Exc.
Gypsum Creek	Exc.	Exc.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (5).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	90	120
Colorado	22	90	121
Plateau	3	138	140
Roaring Fork	7	121	135
Williams Fork	3	78	128
Willow	2	99	136

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	131	113
Colorado	3	71	69
Roaring Fork	–	--	--
Willow	1	83	74

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	205	239	229
Granby	466	278	368	209
Green Mountain	147	44	40	45
Homestake	43	25		11

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	53	53	55
Vega	32	9	16	15
Williams Fork	97	35	46	29
Willow Creek	9	6	2	6

+ 1958–1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
MAY 1, 1975

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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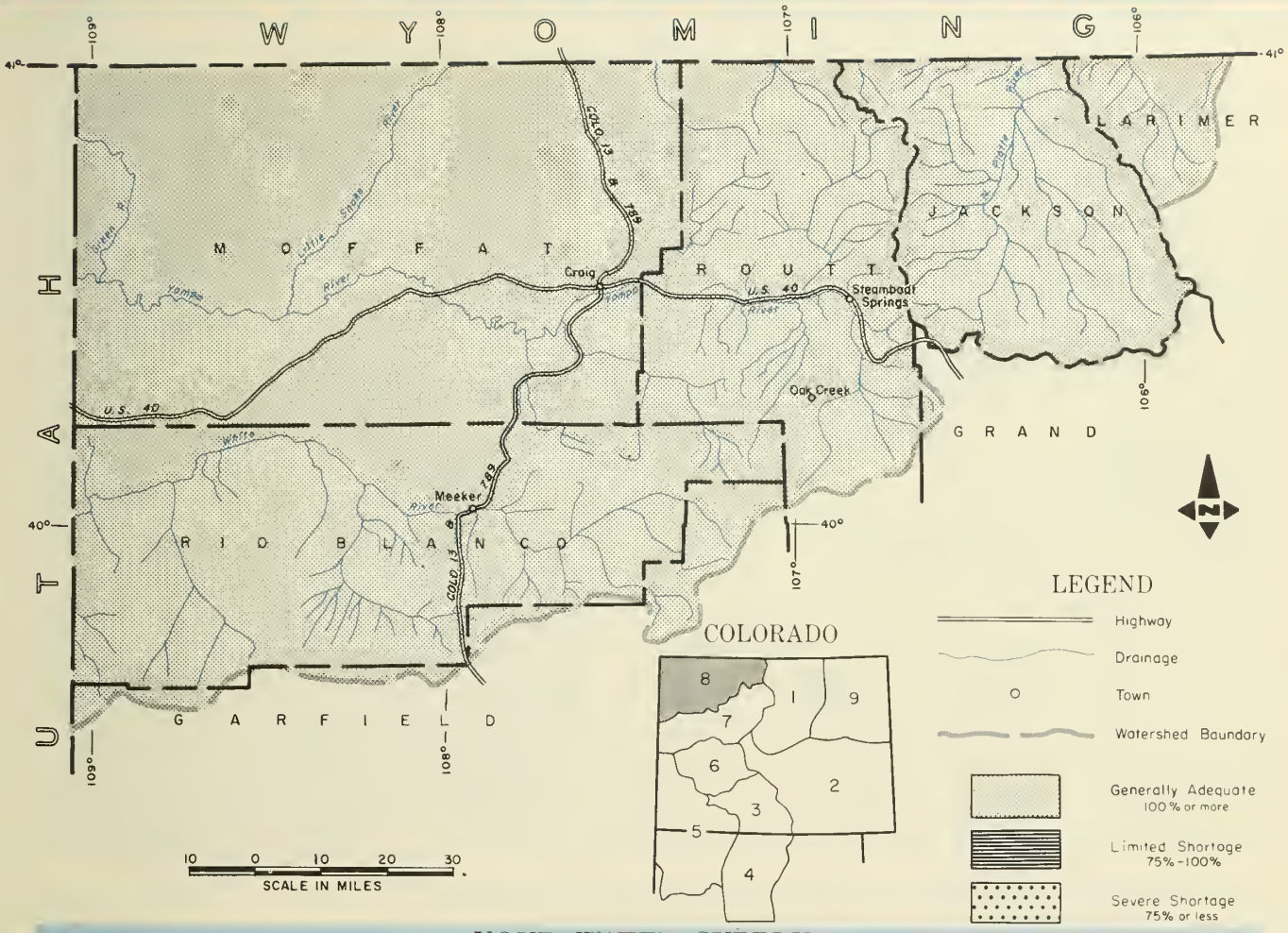

YOUR WATER SUPPLY

WATER SUPPLIES WILL BE MORE THAN ADEQUATE IN NORTHWESTERN COLORADO THIS SUMMER. THE WINTER SNOWPACK WAS GOOD AND CONTINUES TO BUILD. APRIL WAS COLD AND LITTLE SNOW HAS MELTED. STREAMFLOW FORECASTS ARE ALL ABOVE 115%. SOIL MOISTURE IN THE MOUNTAINS IS NEAR NORMAL. PLAINS SOIL MOISTURE IS LISTED AS GOOD. SMALL STREAMS SHOULD HAVE GOOD FLOWS EARLY AND TAPER OFF WITH THE SEASON.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

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DENVER, COLORADO

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U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	250	126	198
Laramie nr Woods	148	116	127
Little Snake at Lily	380	117	324
N. Platte at Northgate	336	140	240
White Nr Meeker	400	136	295
Yampa nr Maybell	1200	133	905
Yampa at Steamboat Springs	365	133	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Avg.
Hunt Creek	Exc.	Avg.
Illinois River	Exc.	Avg.
Michigan River	Exc.	Avg.
Oak Creek	Exc.	Avg.
Trout Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average +
Elk	2	81	153
Laramie	3	70	96
North Platte	5	95	119
White	2	99	166
Yampa	6	88	136

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average +
Laramie	1	104	83
North Platte	2	78	80
Yampa	1	108	136

+ 1958–1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

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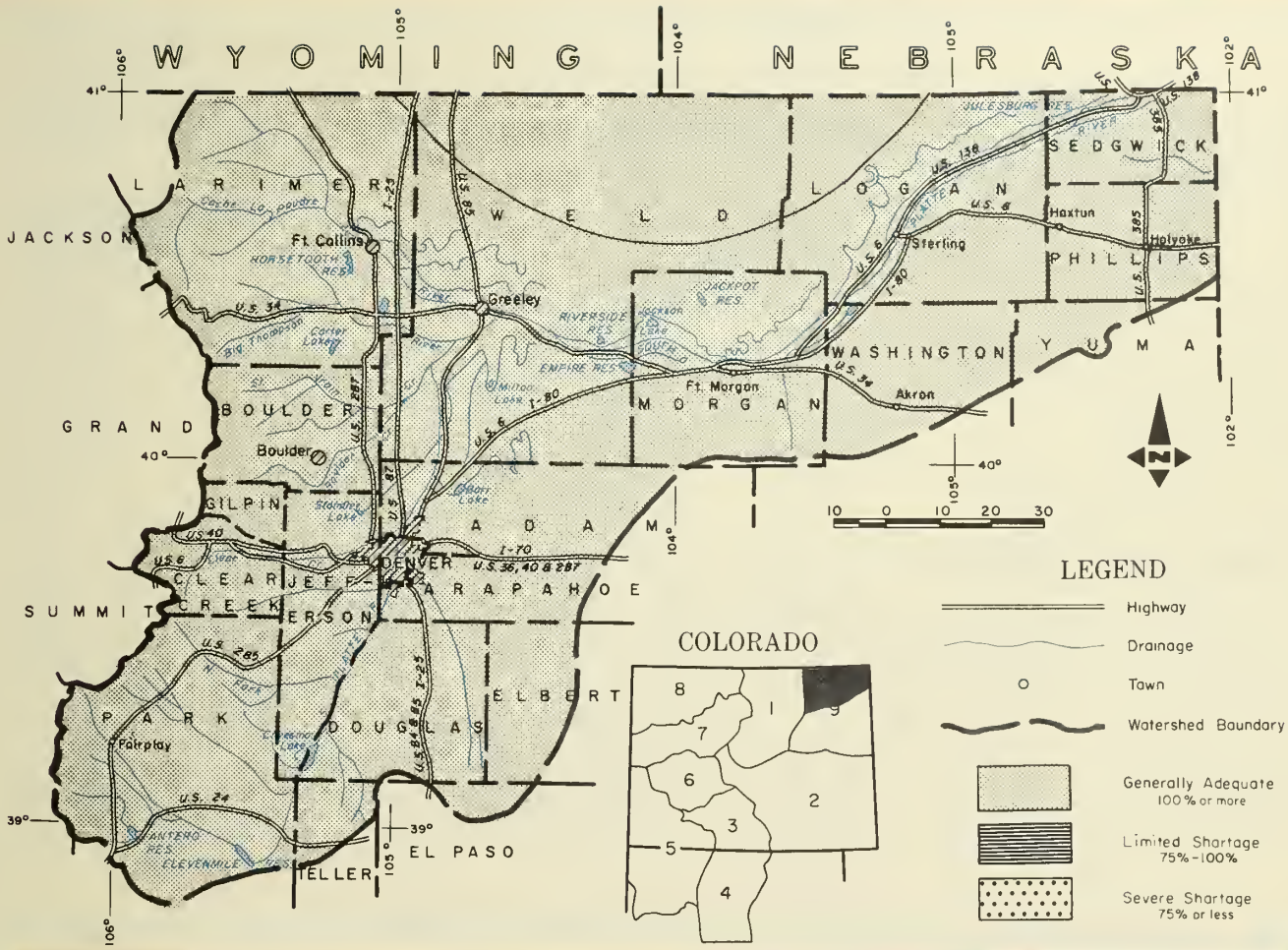

YOUR WATER SUPPLY

RUNOFF ON THE SOUTH PLATTE AND ITS NORTHERN TRIBUTARIES SHOULD BE ABOVE NORMAL THIS YEAR. THE MAINSTEM IS PARTICULARLY GOOD. CARRYOVER STORAGE IS SLIGHTLY BETTER THAN THE 15 YEAR AVERAGE. SOILS ARE REPORTED AS FAIR TO GOOD. FORECASTS ARE BASED ON NORMAL CONDITIONS FOR THE REMAINDER OF THE YEAR. IF CONDITIONS REMAIN AT LEAST NORMAL, WATER SUPPLIES SHOULD BE ADEQUATE.

This report prepared by

JACK N. WASHICHEK
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M. ALT – AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	120	112	107
Boulder at Orodell	60	122	49
Cache La Poudre at Canyon Mouth (2)	265	107	247
Clear Creek at Golden (3)	150	118	127
St. Vrain at Lyons (4)	92	123	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Exc.	Avg.
South Platte from Fort Morgan to Sterling	Exc.	Avg.
South Platte below Sterling	Exc.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	112	115
Boulder	3	83	103
Cache La Poudre	8	88	111
Clear Creek	6	85	111
Saint Vrain	3	146	132
South Platte	3	152	142

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	89	81
Boulder	1	79	57
Cache La Poudre	2	91	82
Clear Creek	2	104	97
Saint Vrain	1	79	57
South Platte	2	104	88

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	109	109	107	99
Cheesman	79	50	68	60
Eleven Mile	98	97	95	89
Empire	38	35	35	33
Horsetooth	144	115	126	121

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35	35	34	33
Julesburg	28	24	23	23
Point of Rocks	70	70	70	66
Prewitt	33	27	28	23
Riverside	58	60	59	58

+ 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1975

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	AVG. 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	4/30	51	16.0	23.2	18.0
McIntyre	4/27	37	9.7	13.5	10.1
Roach	4/27	55	19.0	27.2	18.5
North Platte River					
Cameron Pass	4/30	80	33.6	36.3	31.2
Columbine Lodge	4/30	73	27.9	27.4	22.0
Northgate	4/30	14	4.2	5.3	3.7
Park View	4/28	34	9.2	9.5	6.5
Willow Cr. Pass (B)	4/28	42	13.3	14.1	11.0
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	4/28	20	5.7	8.1	3.9
Boulder Falls	4/28	42	13.3	15.5	13.1
University Camp	4/28	57	19.1	22.4	19.9
Big Thompson River					
Deer Ridge	4/28	19	6.4	1.9	2.7
Hidden Valley	4/28	41	11.7	9.4	11.6
Lake Irene (B)	4/24	62	22.8	25.8	22.9
Long's Peak	4/30	50	17.1	13.4	12.5
Two Mile	4/28	63	19.7	18.8	17.9
Cache La Poudre					
Bennett Creek	4/30	17	5.8	9.1	---
Big South	4/29	1	0.2	0.0	0.6
Cameron Pass	4/30	80	33.6	36.3	31.2
Chambers Lake	4/29	27	10.9	6.8	6.0
Deadman Hill	4/30	51	16.0	23.2	18.0
Hourglass Lake	4/30	22	6.8	11.2	6.0
Joe Wright	4/30	73	28.0	33.8	---
Lost Lake	4/29	37	12.7	12.5	9.9
Pine Creek	4/30	0	0.0	0.4	0.3
Red Feather	4/30	17	5.5	7.3	5.1
Clear Creek					
Baltimore	4/28	20	5.7	8.1	3.9
Berthoud Falls	4/28	49	15.6	16.8	12.4
Empire	4/28	36	10.3	11.9	6.9
Grizzly Peak (B)	4/28	63	21.1	26.0	20.1
Loveland Lift	4/28	71	22.5	23.3	24.0
Loveland Pass	4/28	49	16.4	21.9	15.0
Saint Vrain River					
Copeland Lake	4/27	15	5.2	1.4	2.4
Ward	4/29	23	6.7	4.8	5.6
Wild Basin	4/27	44	14.8	12.1	12.3
South Platte River					
Como	4/30	27	8.1	3.2	---
Geneva Park	4/28	13	3.3	1.1	1.9
Horseshoe Mountain	4/29	47	14.0	9.9	---
Hoosier Pass	4/28	48	17.6	13.0	12.9
Jefferson Creek	4/30	40	11.7	7.3	8.1
Mosquito	4/28	42	13.4	5.9	---
Trout Creek Pass	4/29	18	5.6	0.0	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	4/25	25	7.7	6.8	3.6
Cooper Hill (B)	5/02	50	13.0	15.5	12.1
East Fork	4/29	32	10.3	10.5	7.5
Four Mile Park	4/29	17	5.1	0.2	1.4
Fremont Pass	4/29	64	20.7	21.2	18.1
Garfield	4/30	47	19.9	10.9	8.6
Hermit Lake	4/28	45	18.0	3.9	---
Monarch Pass	4/30	63	24.8	18.9	16.3
Tennessee Pass	4/29	40	13.0	8.0	8.5
Twin Lakes Tunnel	4/28	41	13.4	12.1	9.4
Westcliffe	4/28	30	11.5	0.0	1.6

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTEN (INCHES): LAST YEAR	AVG. 58-72
Cucharas River					
Apishapa	4/28	19	5.7	0.0	3.3
Cucharas Creek	4/28	31	10.9	---	---
La Veta Pass (B)	4/28	23	7.3	0.0	2.1
Purgatoire River					
Bourbon	4/29	22	7.3	0.4	2.5
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	4/25	18	6.4	0.0	0.7
Summitville	4/28	87	30.4	17.8	19.0
Conejos River					
Cumbres	4/28	73	26.3	12.4	13.7
La Manga	4/28	76	29.2	13.3	---
Platoro	4/30	64	26.5	7.6	10.5
River Springs	NS	--	---	0.0	0.3
Culebra River					
Brown Cabin	5/03	18	5.9	0.0	---
Cottonwood (B)	NS	--	---	---	---
Culebra	5/02	31	9.5	5.0	3.9
La Veta Pass (B)	4/28	23	7.3	0.0	2.1
Trinchera (B)	5/01	28	9.4	---	---
Rio Grande					
Cochetopa Pass	4/25	32	10.5	4.6	3.3
Grayback	4/28	64	24.1	12.9	---
Hiway	5/02	105	39.4	21.1	25.8
Lake Humphrey	4/29	28	9.1	0.5	0.9
Love Lake	4/30	45	14.1	0.0	---
Pass Creek	5/02	47	18.4	0.1	3.5
Pool Table	4/30	27	8.4	0.2	2.4
Porcupine	4/29	47	16.4	2.6	7.4
Santa Maria	4/28	23	7.3	0.0	0.8
Upper Rio Grande	4/28	41	13.5	0.8	2.2
Wolf Creek Pass	5/02	99	43.2	16.9	21.5
Wolf Cr. Summit (B)	5/02	117	42.9	26.9	30.4
RIO GRANDE BASIN-NM					
Bateman	5/01	43	17.4	---	---
Chamita	4/30	24	8.5	0.0	0.2
Cordova	4/30	33	11.3	---	---
Hematite	4/30	6	2.2	---	---
Hopewell	4/29	60	24.3	10.9	---
Panchuela	4/29	8	2.9	---	---
Red River	4/30	18	7.9	---	---
Red River #2	4/30	16	6.3	---	---
Rio En Medio	4/28	21	7.6	0.0	---
Sandoval	4/28	23	8.3	---	---
Taos Canyon	4/28	11	4.0	---	---
Tres Ritos	4/29	5	2.2	---	---

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1975

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
SAN JUAN - DOLORES					
Animas River					
Cascade	4/28	47	18.7	1.2	4.2
Lemon	4/29	37	13.7	0.0	---
Mineral Creek	4/28	71	24.8	10.2	11.6
Molas Lake	4/28	55	20.8	6.9	7.8
Purgatory	4/29	91	34.3	11.7	---
Red Mt. Pass (B)	4/28	125	46.8	30.6	32.5
Silverton Sub-Sta.	4/28	31	10.4	0.0	0.3
Spud Mountain	4/28	100	40.3	18.7	21.7
Dolores River					
Lizard Head	4/29	70	29.5	18.9	14.9
Lone Cone	4/29	57	22.5	10.1	---
Rico	4/29	23	8.2	0.0	0.1
Telluride	4/29	36	12.5	0.0	1.4
Trout Lake	4/29	62	24.2	10.5	9.1
San Juan River					
Chama Divide (B)	NS	--	---	0.0	0.0
Chamita (B)	4/30	24	8.5	0.0	0.2
Upper San Juan	5/02	104	45.2	20.1	25.0
Wolf Creek Pass (B)	5/02	99	43.0	16.9	21.5
Wolf Creek Summit	5/02	117	42.9	26.9	30.4
GUNNISON BASIN					
Gunnison River					
Alexander Lake	4/29	77	30.9	23.5	21.9
Blue Mesa	4/29	30	9.7	3.3	1.7
Butte	4/28	56	18.4	15.2	---
Cochetopa Pass (B)	4/25	32	10.5	4.6	3.3
Crested Butte	4/28	39	16.3	11.2	7.0
Keystone	4/28	62	24.7	21.7	17.2
Lake City	4/29	35	11.4	5.7	4.2
Mesa Lakes (B)	4/25	64	24.1	17.8	15.8
McClure Pass	4/28	51	19.5	10.3	9.1
Park Cone	4/30	33	11.0	7.2	7.3
Park Reservoir	4/28	85	33.0	22.4	24.0
Porphyry Creek	4/30	65	25.0	20.0	16.5
Tomichi	4/30	45	16.2	13.2	10.3
Surface Creek					
Alexander Lake	4/29	77	30.9	23.5	21.9
Mesa Lakes (B)	4/25	64	24.1	17.8	15.8
Park Reservoir	4/28	85	33.0	22.4	24.0
Uncompahgre River					
Ironton Park	4/29	62	24.7	12.5	7.0
Red Mountain Pass	4/28	125	46.8	30.6	32.5
Telluride (B)	4/29	36	12.5	0.0	1.4
COLORADO BASIN (Main)					
Blue River					
Blue River	4/28	25	8.0	7.9	5.9
Fremont Pass	4/29	64	20.7	21.2	18.1
Frisco	4/28	30	8.3	7.1	4.7
Grizzly Peak	4/28	63	21.1	26.0	20.1
Hoosier Pass (B)	4/28	48	17.6	13.0	12.9
Shrine Pass	4/28	68	20.0	25.2	20.0
Snake River	4/28	16	4.3	10.5	3.3
Summit Ranch	4/29	26	7.7	8.3	4.9

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTEN (INCHES): LAST YEAR	PAST RECORD: WATER CONTEN (INCHES): AVG 58-72
Colorado River					
Arrow	4/29	36	12.8	18.4	11.1
Berthoud Pass	4/28	49	16.6	24.0	16.0
Berthoud Summit	4/28	65	21.5	27.5	21.1
Cooper Hill	5/02	50	13.0	15.5	12.1
Fiddler Gulch	4/29	54	18.1	15.9	14.5
Glenmar Ranch	4/28	25	7.1	8.6	4.4
Gore Pass	4/29	32	11.9	9.0	7.8
Grand Lake	4/24	31	6.7	7.9	4.0
Lake Irene	4/24	62	22.8	25.8	22.9
Lapland	4/28	36	10.1	13.9	7.3
Lulu	4/26	59	23.4	27.3	20.3
Lynx Pass	4/29	39	14.7	11.9	8.4
McKenzie Gulch	4/29	18	4.7	1.5	1.0
Middle Fork	4/28	33	9.5	10.3	6.2
Milner	4/24	39	12.5	14.3	13.1
North Inlet	4/23	29	8.9	6.1	6.3
Pando	4/28	35	11.3	10.2	8.0
Phantom Valley	4/24	33	10.1	8.1	7.0
Ranch Creek	4/29	31	7.6	15.9	9.4
Tennessee Pass (B)	4/29	40	13.0	8.0	8.5
Vail Pass	4/28	56	16.7	22.7	15.6
Vasquez	4/30	41	13.0	16.7	12.8
Roaring Fork River					
Aspen	4/28	61	21.6	24.7	17.7
Independence Pass	4/28	55	18.5	16.8	16.8
Ivanhoe	4/29	64	21.9	25.0	17.7
Kiln	4/29	46	16.3	17.0	---
Lift	4/28	60	20.2	17.0	19.0
McClure Pass	4/28	51	19.5	10.3	9.1
Nast	4/29	16	5.0	1.7	2.0
North Lost Trail	4/28	43	15.8	6.1	8.3
Williams Fork River					
Glenmar Ranch	4/28	25	7.1	8.6	4.4
Jones Pass	4/28	55	17.3	24.6	15.8
Middle Fork	4/28	33	9.5	10.3	6.2
Willow Creek					
Granby	4/28	21	7.1	6.5	4.0
Willow Creek Pass	4/28	42	13.3	14.1	11.0
Plateau Creek					
Mesa Lakes	4/25	64	24.1	17.8	15.8
Park Reservoir	4/28	85	33.0	22.4	24.0
Trickle Divide	4/28	89	36.6	27.6	26.9
YAMPA BASIN					
Elk River					
Elk River	4/29	56	20.7	21.9	15.4
Hahn's Peak	4/29	39	15.8	13.2	8.5
White River					
Burro Mountain	4/29	66	23.6	21.8	15.0
Rio Blanco	4/28	50	17.6	19.8	9.8
Yampa River					
Bear River	4/30	33	12.1	9.8	7.5
Columbine (B)	4/30	73	27.9	27.4	22.0
Crosho	4/30	50	17.3	15.4	---
Dry Lake	4/28	55	22.6	28.7	16.9
Fish Creek	4/28	121	50.8	56.7	---
Lynx Pass (B)	4/29	39	14.7	11.9	8.4
Rabbit Ears	4/29	84	31.5	41.6	27.1
Tower	4/28	145	61.5	66.1	---
Yampa View	4/30	40	15.5	20.9	9.3

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of May 1, 1975

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	4/29	11.1	7.3	9.7	8.5
Willow Pass	4/28	9.5	5.4	6.5	7.3
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	4/29	6.9	2.6	3.3	4.6
Big Thompson River					
Beaver Dam	4/30	7.1	4.0	3.6	4.8
Guard Station	4/30	6.9	3.3	4.7	4.4
Two Mile	4/30	9.1	4.5	4.9	5.4
Clear Creek					
Clear Creek	4/28	9.5	5.7	5.8	6.1
Hoop Creek	4/28	4.9	3.1	2.7	3.0
Cache La Poudre River					
Feather	4/30	10.1	6.6	8.2	8.1
Laramie Road	4/29	12.4	7.2	6.9	8.7
South Platte River					
Hoosier Pass	4/28	7.8	4.7	4.6	5.3
Kenosha Pass	4/30	4.4	3.1	2.9	3.6
ARKANSAS BASIN					
Arkansas River					
Garfield	4/30	6.7	4.6	4.7	4.4
Leadville	4/29	7.8	4.0	4.8	4.6
Twin Lakes Tunnel	4/29	4.5	2.7	2.9	2.9
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	4/23	10.7	6.2	8.1	8.4
Rio Grande					
Bristol View	4/30	6.1	2.1	5.4	4.9
La Veta Pass	No Reading	11.9	---	10.4	11.4
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	No Reading	9.1	---	5.3	7.0
Mineral Creek	No Reading	5.7	---	3.0	4.1
Molas Lake	No Reading	9.4	---	3.2	6.2
Dolores River					
Dolores	4/29	19.6	10.8	18.8	12.0
Lizard Head	4/29	11.8	2.2	3.4	7.0
Rico	4/29	13.8	5.8	3.5	9.8
GUNNISON BASIN					
Gunnison River					
King	4/30	3.3	2.4	2.4	2.4
COLORADO BASIN (MAINSTEM)					
Blue River					
Blue River	4/28	4.2	3.4	2.6	3.0
Colorado River					
Berthoud Pass	4/28	3.9	3.0	3.0	3.0
Gore	4/29	4.9	3.9	4.2	4.1
Grand Mesa	No Reading	12.5	---	9.9	11.6
Ranch Creek	4/29	8.7	3.0	5.7	6.2
Vail	No Reading	12.3	---	8.3	10.1
Roaring Fork River					
Placita	No Reading	9.3	---	7.7	7.6
YAMPA BASIN					
Yampa River					
Hahn's Peak	4/29	13.1	13.2	12.2	9.7

ALL PROFILES 4 FEET DEEP

GPO 859-486

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

- Colorado State Engineer
- New Mexico State Engineer
- Nebraska State Engineer
- Colorado State University Experiment Station
- Rocky Mountain Forest and Range Experiment Station

FEDERAL

- Department of Agriculture
  - Forest Service
  - Soil Conservation Service
- Department of Interior
  - Bureau of Reclamation
  - Geological Survey
  - National Park Service
  - Indian Service
- Department of Commerce
  - NOAA, National Weather Service
- Defence Department
  - Army Engineer Corps
- Atomic Energy Commission

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- Public Service Company of New Mexico

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- City of Boulder
- City of Greeley
- City of Fort Collins

WATER USERS ORGANIZATIONS

- Arkansas Valley Ditch Association
- Colorado River Water Conservation District

IRRIGATION PROJECTS

- Farmers Reservoir and Irrigation Company
- San Luis Valley Irrigation District
- Santa Maria Reservoir Company
- Costilla Land Company
- Uncompahgre Valley Water Users' Association
- Twin Lakes Reservoir and Canal Company
- Trinchera Irrigation Co.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE
Collaborating with
COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
FEB. 1, 1976

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with o resultont average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly ar semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at volley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SURVEYOR ENROUTE TO THE MT. BALDY ARIZONA SNOW COURSE
SCS PHOTO AZ-5460

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperotion with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Roam 217, Ancharage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idoho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevado 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokone, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecost and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OREG 1979

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

M. D. BURDICK

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

ALBERT W. HAMELSTROM

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN

DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
BERNARD A. SHAFER, Assistant Snow Survey Supervisor
JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Bronson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosco Hooper, Mt. Blanco, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

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WATER SUPPLY OUTLOOK

as of

FEBRUARY 1, 1976

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
FEBRUARY 1, 1976

SNOWFALL HAS BEEN GENERALLY BELOW NORMAL OVER MOST OF COLORADO AND NEW MEXICO. NEW MEXICO HAS A FEW HIGH SPOTS. HIGH ELEVATION SNOW IS PARTICULARLY LIGHT. SOME OF THE HIGH ELEVATION SNOWFALL SUCH AS WOLF CREEK PASS IS ONLY 65% OF NORMAL. WHILE MEDIUM ELEVATION SNOWFALL IS NEAR NORMAL TO SLIGHTLY ABOVE. THIS IS A SOMEWHAT UNUSUAL CONDITION. THERE IS STILL TIME LEFT TO INCREASE THE SNOWPACK. ONLY ABOUT HALF OF THE SNOW SEASON IS OVER. THE WINTER HAS BEEN MILD IN BOTH STATES.

COLORADO -- THE SNOWPACK IS SLIGHTLY BELOW NORMAL FOR THE STATE. SOME OF THE SNOW COURSES, ESPECIALLY AT LOW ELEVATIONS, ARE NEAR TO OR SLIGHTLY ABOVE NORMAL, HOWEVER, THE STATE AS A WHOLE IS BELOW. THERE IS STILL ADEQUATE TIME TO INCREASE THE SNOWPACK. THE COLORADO BASIN IN THE MIDDLE OF THE STATE HAS THE BEST SNOWPACK. SOIL MOISTURE CONDITIONS OVER THE STATE ARE REPORTED AS FAIR TO GOOD. REPORTS INDICATE WARM AND DRY CONDITIONS HAVE EXISTED MOST OF THE WINTER. CARRYOVER STORAGE IS NEAR NORMAL.

NEW MEXICO -- SNOW COURSES ON THE PECOS ARE 120% OF NORMAL AND ON THE RED RIVER DRAINAGE 150%. THE REST OF THE STATE'S SNOWPACK IS NEAR NORMAL. NONE OF THE DRAINAGES INDICATE DEFICIENT SNOW. IF THE REMAINDER OF THE YEAR PRODUCES NORMAL SNOW, RUNOFF SHOULD BE NEAR AVERAGE. CARRYOVER STORAGE IS 131% OF NORMAL, HOWEVER, THIS HIGH PERCENTAGE IS GENERALLY DUE TO EL VADE WHICH CONTAINS 122,000 ACRE FEET. NORMALLY IT IS EMPTY. SOIL MOISTURE CONDITIONS ARE GENERALLY POOR, HOWEVER, SEVERAL STATIONS REPORT FAIR CONDITIONS.

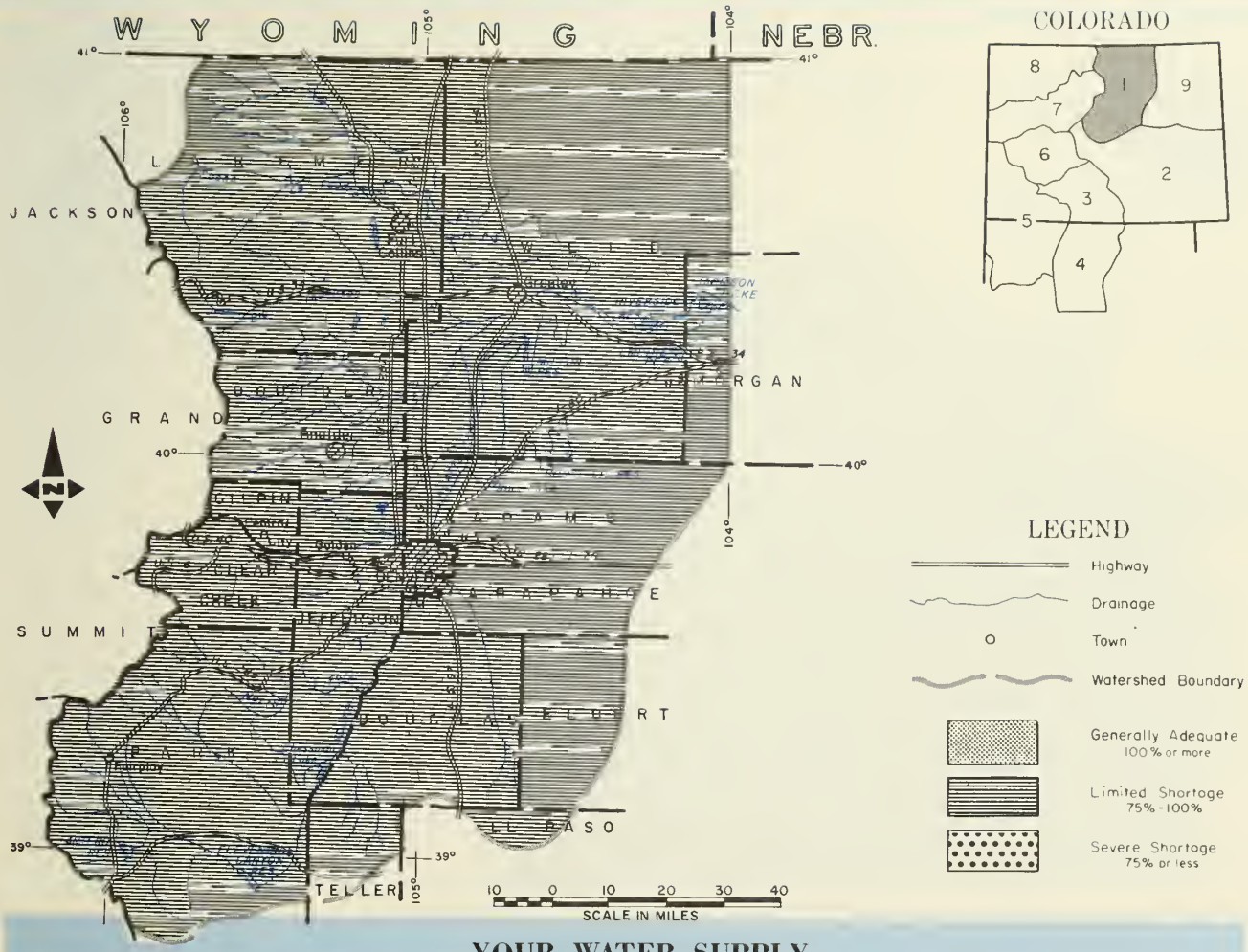
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

FEBRUARY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

FIRST OF THE MONTH SNOW SURVEYS INDICATE LESS THAN NORMAL SNOW CONDITIONS ON ALL THE NORTHERN TRIBUTARIES TO THE SOUTH PLATTE, BUT SLIGHTLY ABOVE ON THE MAINSTEM. BOULDER CREEK HAS ONLY 75% OF THE 15 YEAR NORMAL. THIS CONDITION COULD CHANGE RAPIDLY WITH A COUPLE OF GOOD STORMS. CARRYOVER STORAGE IS GOOD. VALLEY SOILS ARE REPORTED TO BE IN FAIR TO GOOD CONDITION. TIME STILL REMAINS TO IMPROVE SNOW CONDITIONS.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A MOSS - AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

RODNEY M ALT - AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
No numerical forecasts issued until March 1, 1976.			

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Avg.	Fair
Coal Creek	Avg.	Fair
North Fork of South Platte	Avg.	Fair
North Fork of Cache La Poudre	Avg.	Fair
Ralston Creek	Avg.	Fair
Rock Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average *
Big Thompson	5	92	88
Boulder	3	75	74
Cache La Poudre	6	97	96
Clear Creek	6	76	84
Saint Vrain	2	78	84
South Platte	2	89	108

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average*
Antero	33	16	16	14
Barr Lake	32	25	25	21
Black Hollow	8	4	5	4
Boyd Lake	44	39	37	37
Cache La Poudre	10	4	7	8
Carter Lake	109	92	86	77
Chambers Lake	9	2	3	3
Cheesman	79	49	41	56
Cobb Lake	34	15	17	15
Eleven Mile	98	98	96	87
Fossil Creek	12	4	7	7
Gross	43	24	22	29
Halligan	6	2	4	3
Horsetooth	144	92	82	86
Lake Loveland	14	10	10	9
Lone Tree	9	4	5	6
Mariano	5	5	5	5
Marshall	10	4	6	4
Marston	18	13	16	14
Milton	24	16	15	13
Standley	42	29	27	15
Terry	8	6	6	5
Union	13	11	12	10
Windsor	19	12	10	10

* 1958-1972 period.

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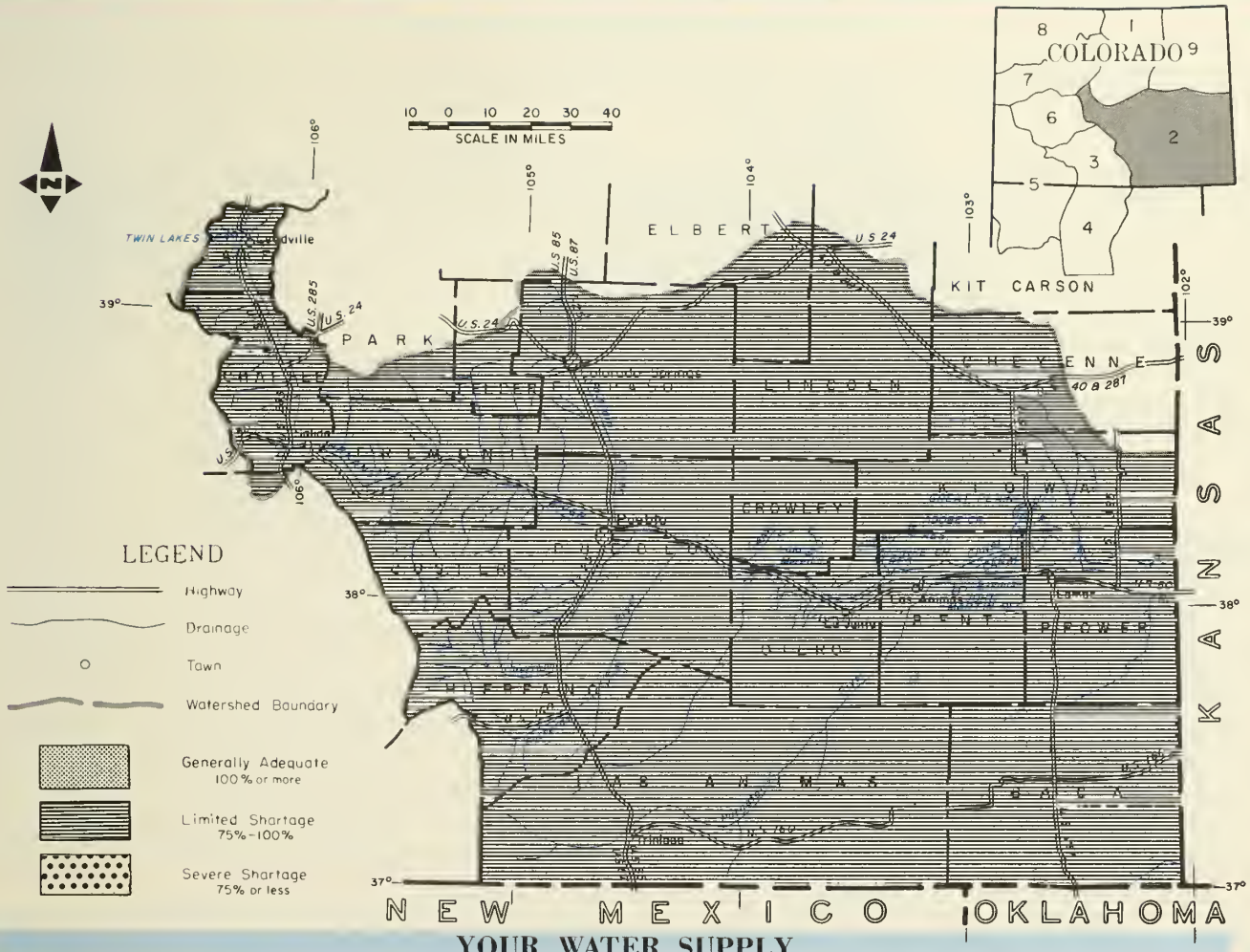
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

FEBRUARY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWPACK IN THE ARKANSAS BASIN IS GENERALLY NEAR TO SLIGHTLY BELOW AVERAGE. SNOWFALL WAS BELOW AVERAGE DURING AN UNSEASONABLY WARM AND WINDY JANUARY. VALLEY SOIL MOISTURE IS FAIR TO POOR. ADDITIONAL MOISTURE IS NEEDED. RESERVOIR STORAGE IS WELL BELOW AVERAGE BUT NEAR THE SAME AS LAST YEAR. IF THE CURRENT TREND OF BELOW NORMAL PRECIPITATION CONTINUES, IRRIGATION WATER SUPPLIES MAY BE SHORT IN SOME AREAS.

This report prepared by

JACK N WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A MOSS - AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE— SOIL CONSERVATION SERVICE

D W GILLASPIE - AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
No numerical forecasts issued until March 1, 1976.			

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Apishapa River	Avg.	Avg.
Fountain Creek	Avg.	Avg.
Grape Creek	Fair	Fair
Hardscrabble Creek	Fair	Fair
Monument Creek	Fair	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Arkansas	7	84	94
Cucharas	2	75	88
Purgatoire	1	88	105

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Adobe	62	0	0	17
Clear Creek	11	5	2	8
Cucharas	40	0	0	3
Great Plains	150	0	0	49
Horse Creek	27	4	0	6
John Martin	354	7	4	85
Meredith	42	0	0	10
Model	15	1	0	3
Turquoise	121	52	39	--
Twin Lakes	58	18	18	26

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

FEBRUARY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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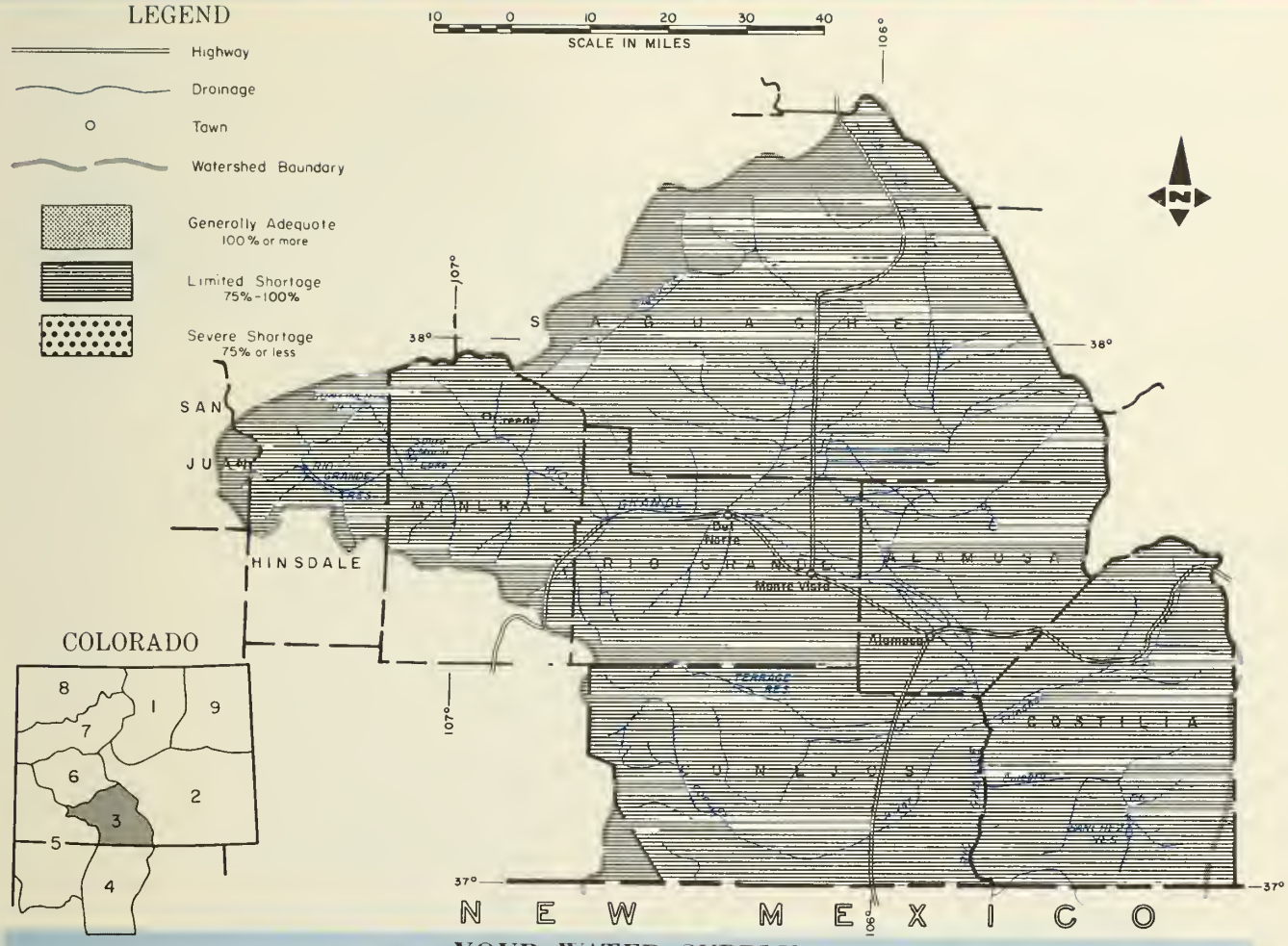

YOUR WATER SUPPLY

THE RIO GRANDE BASIN STREAMS WILL FLOW LESS THAN NORMAL UNLESS SNOWFALL IS MUCH ABOVE NORMAL IN THE NEXT THREE MONTHS. CURRENT SNOWPACK RANGES FROM 64% OF NORMAL ON THE CONEJOS TO 88% ON THE ALAMOSA. CARRYOVER STORAGE IS NEAR NORMAL. SOIL MOISTURE CONDITONS IN THE VALLEYS IS REPORTED AS FAIR.

This report prepared by

JACK N WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK—STATE CONSERVATIONIST
DENVER, COLORADO

D W GILLASPIE AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	* Average
No numerical forecasts issued until March 1, 1976.			

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Fair	Poor
Sangre de Cristo Cr.	Fair	Poor
Trinchera Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Alamosa	2	102	88
Conejos	2	87	64
Culebra	2	70	78
Rio Grande	10	66	71

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Continental	27	4	2	5
Platoro	60		19	9
Rio Grande	46	16	5	19
Sanchez	103		4	13
Santa Maria	45	9	4	6
Terrace	18	--	7	5

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

February 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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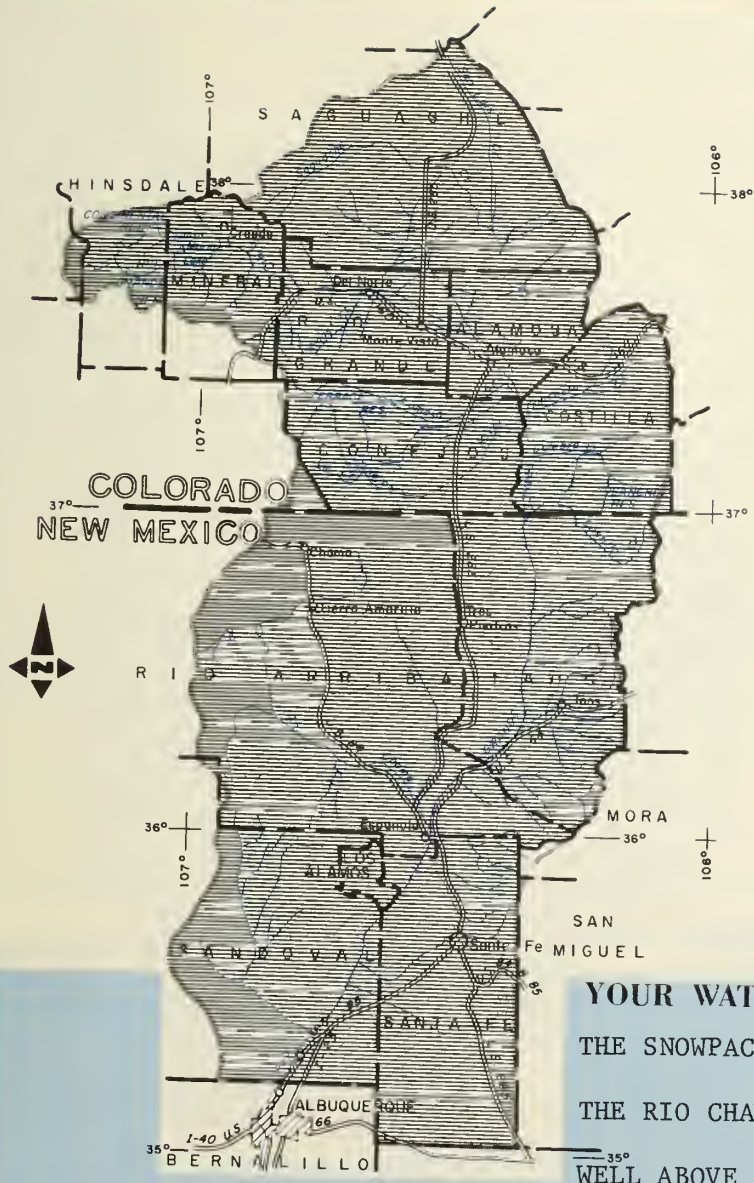

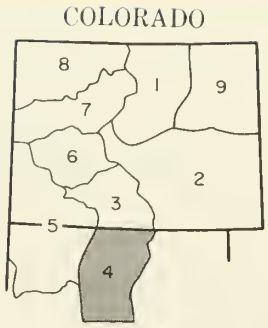

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

THE SNOWPACK VARIES FROM NEAR AVERAGE ON THE RIO CHAMA AND RIO GRANDE DRAINAGES TO WELL ABOVE AVERAGE ON THE PECOS AND RED RIVER DRAINAGES. SOIL MOISTURE CONDITIONS AT VALLEY LOCATIONS ARE RATED FROM FAIR TO POOR FOR THIS TIME OF YEAR. CARRYOVER STORAGE IS EXCELLENT IN MOST LARGE RESERVOIRS.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

MARION E. STRONG – STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

JAMES E. TATUM – AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) March—July

FORECAST POINT	FORE-CAST	% of Average	Average *
No numerical forecasts issued until March 1, 1976.			

(1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo Creek	Avg.	Avg.
Mora River	Exc.	Avg.
Nambe Creek	Avg.	Avg.
Rio Ojo Caliante	Avg.	Avg.
Rio Pueblo de Taos	Exc.	Avg.
Santa Fe Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Pecos	1	81	120
Red River	2	222	148
Rio Chama	4	102	96
Rio Grande, NM	9	85	94
Rio Hondo	-	--	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Alamogordo	111	35	40	80
Avalon	5	3	5	--
Caballo	344	69	40	50
Conchas	273	82	129	185
El Vado	195	122	87	2
Elephant Butte	2195	684	427	442
McMillan	34	5	32	--

* 1958-1972 period.

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SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
FEBRUARY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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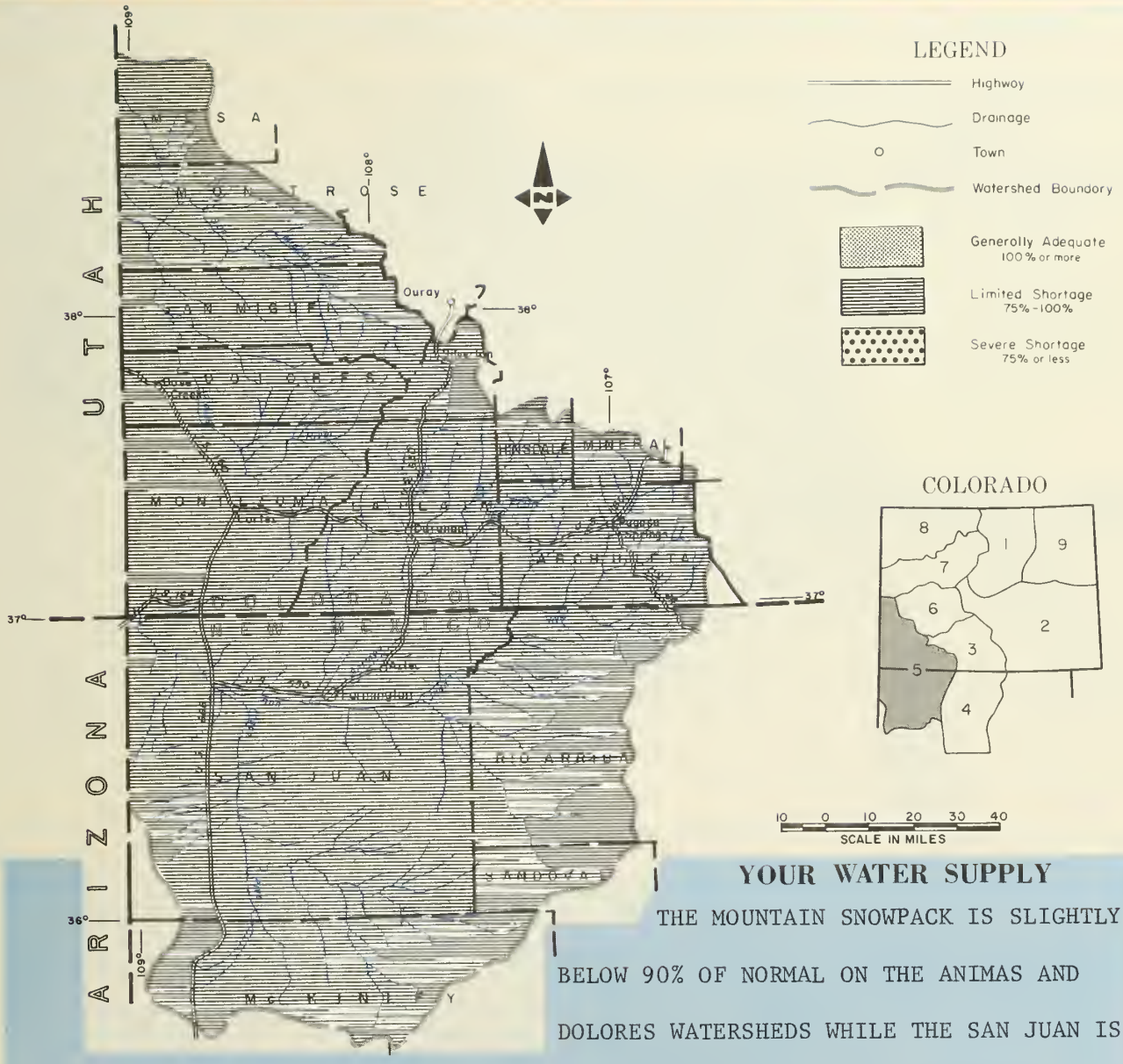

YOUR WATER SUPPLY

THE MOUNTAIN SNOWPACK IS SLIGHTLY BELOW 90% OF NORMAL ON THE ANIMAS AND DOLORES WATERSHEDS WHILE THE SAN JUAN IS CONSIDERABLY LOWER AT 69% OF AVERAGE. THIS SNOWPACK PICTURE MAY CHANGE SINCE IT IS STILL EARLY IN THE SEASON. SOIL MOISTURE IN IRRIGATED AREAS IS REPORTED TO BE FAIR. STORAGE IN AREA RESERVOIRS IS GOOD TO EXCELLENT.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

MARION E. STRONG - STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

D. W. GILLASPIE - AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E. TATUM - AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
No numerical forecasts issued until March 1, 1976.			

(1) Observed flow plus change in storage in Vallicito Reservoir. (2) April – July

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida River	Avg.	Fair
Hermosa Creek	Avg.	Fair
West Dolores River	Avg.	Fair
Williams Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Animas	6	71	88
Dolores	5	78	87
San Juan	5	64	69

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Groundhog	22	9	9	9
Jackson Gulch	10	6	3	4
Lemon	40	20	6	19
Navajo	1696	1130	918	1237
Vallecito	126	53	27	53

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO
as of

FEBRUARY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE MOUNTAIN SNOWPACK VARIES FROM NEAR AVERAGE ON THE UNCOMPAHGRE DRAINAGE TO BELOW AVERAGE ON THE GUNNISON AND SURFACE CREEK DRAINAGES. LOWER ELEVATIONS ARE NEARER TO AVERAGE THAN ARE HIGHER ELEVATIONS WHICH ARE GENERALLY BELOW AVERAGE. SOIL MOISTURE IN IRRIGATED AREAS IS REPORTED AS GOOD TO FAIR. STORAGE IN BLUE MESA AND TAYLOR RESERVOIRS IS SLIGHTLY BELOW AVERAGE WHILE MORROW POINT IS ABOVE NORMAL.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
No numerical forecasts issued until March 1, 1976.			

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ohio Creek	Fair	Fair
Slate River	Fair	Fair
Taylor River	Fair	Fair
Tomichi Creek	Fair	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Gunnison	10	76	81
Surface Creek	3	77	72
Uncompahgre	3	72	97

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		Last Year	This Year	Average *
Blue Mesa	830	435	473	491
Morrow Point	121	115	116	100
Taylor	106	51	63	63

* 1958-1972 period.

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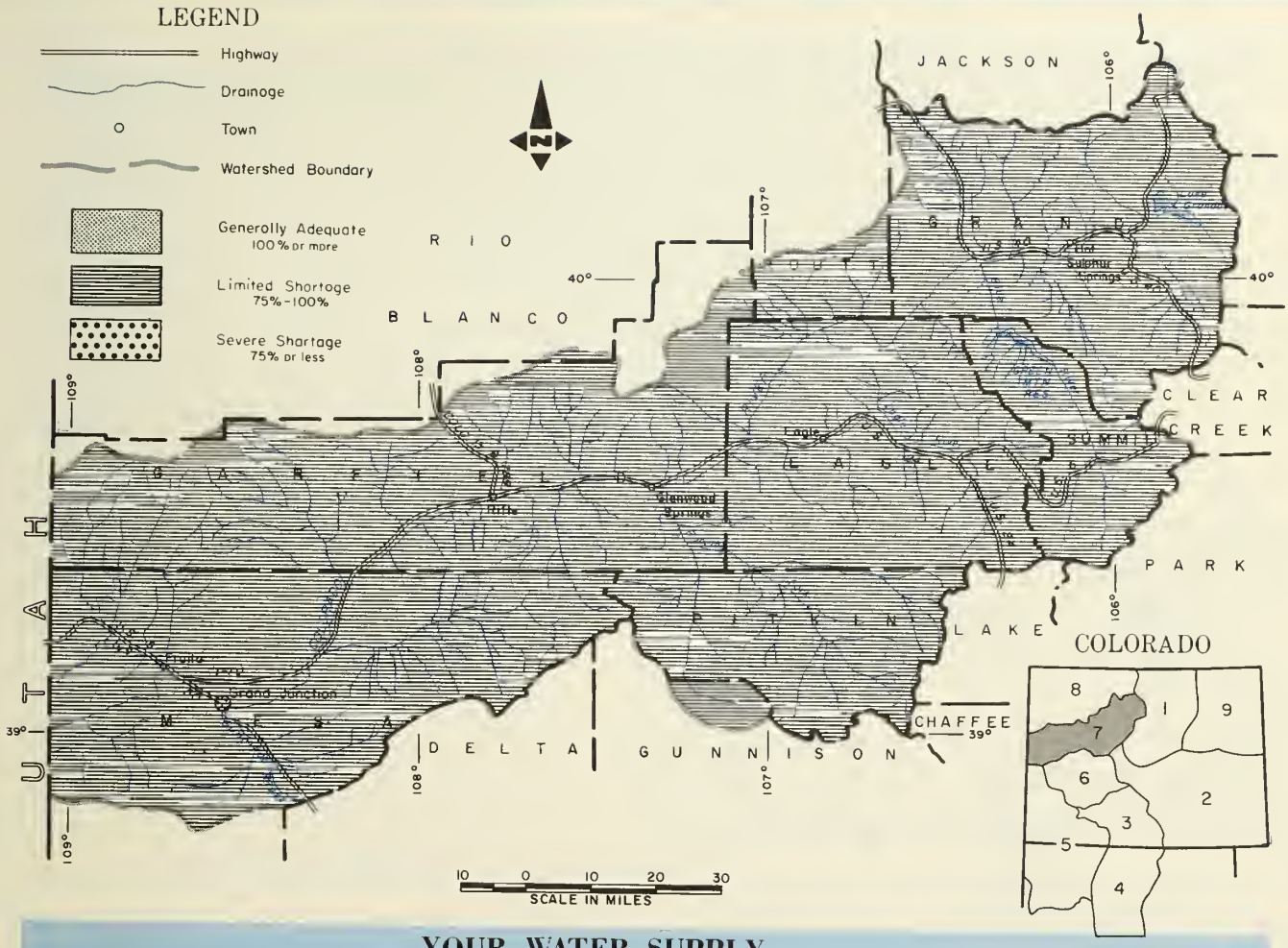
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

FEBRUARY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

MOST TRIBUTARY STREAMS OF THE COLORADO HAVE A NEAR NORMAL SNOWPACK. THE BLUE RIVER HAS THE HIGHEST WITH 102% AND THE PLATEAU IS LOW WITH ONLY 74%. THE GRANDE MESA IS SLIGHTLY DEFICIENT. ONLY ABOUT HALF OF THE SNOW SEASON HAS PASSED, SO ADEQUATE TIME REMAINS TO INCREASE THE PACK. CARRYOVER STORAGE IS UP SLIGHTLY. THE WARM DRY CLIMATE THIS YEAR HAS DRIED IRRIGATED LANDS. SOME ADDITIONAL WATER WILL BE REQUIRED TO WET THESE LANDS.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON - AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
No numerical forecasts issued until March 1, 1976.			

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Avg.	Fair
Eagle River	Avg.	Fair
Gypsum Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Blue River	7	91	102
Colorado	17	86	94
Plateau	3	80	73
Roaring Fork	7	82	87
Williams Fork	3	86	92
Willow	2	103	94

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Dillon	254	229	213	234
Granby	466	319	330	255
Green Mountain	139	85	77	77
Homestake	43	0	33	20
Ruedi	101	68	66	70
Vega	32	12	6	10
Williams Fork	97	52	43	34
Willow Creek	9	7	6	6

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
FEBRUARY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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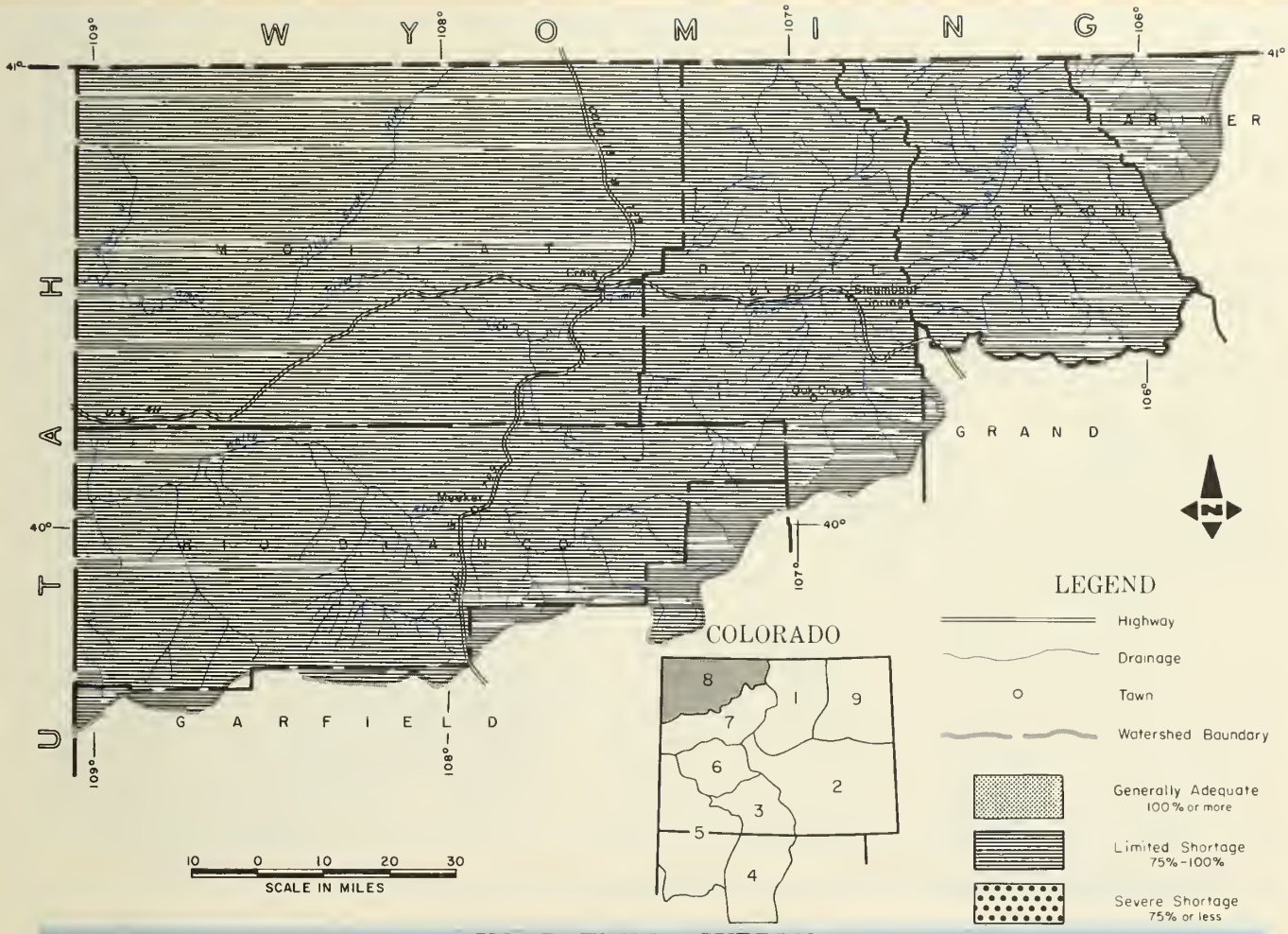

YOUR WATER SUPPLY

SNOW CONDITONS IN NORTHERN AND NORTHWEST COLORADO ARE BELOW NORMAL EXCEPT ON THE ELK RIVER DRAINAGE. SNOW COURSES ON THE ELK INDICATE 111% MORE SNOW THAN NORMAL. THE LARAMIE AND RIVER DRAINAGES HAVE ONLY ABOUT 75% OF NORMAL SNOW. THE SNOW SEASON IS ONLY ABOUT HALF OVER SO ADEQUATE TIME REMAINS TO IMPROVE CONDITIONS. SOIL MOISTURE CONDITIONS IN THE VALLEYS ARE LISTED AS FAIR.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON - AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE— SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
No numerical forecasts issued until March 1, 1976.			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Avg.	Fair
Hunt Creek	Avg.	Fair
Illinois River	Avg.	Fair
Michigan River	Avg.	Fair
Oak Creek	Fair	Fair
Trout Creek	Fair	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Elk	1	111	111
Laramie	1	96	79
North Platte	5	83	90
White	2	67	74
Yampa	5	68	86

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
FEBRUARY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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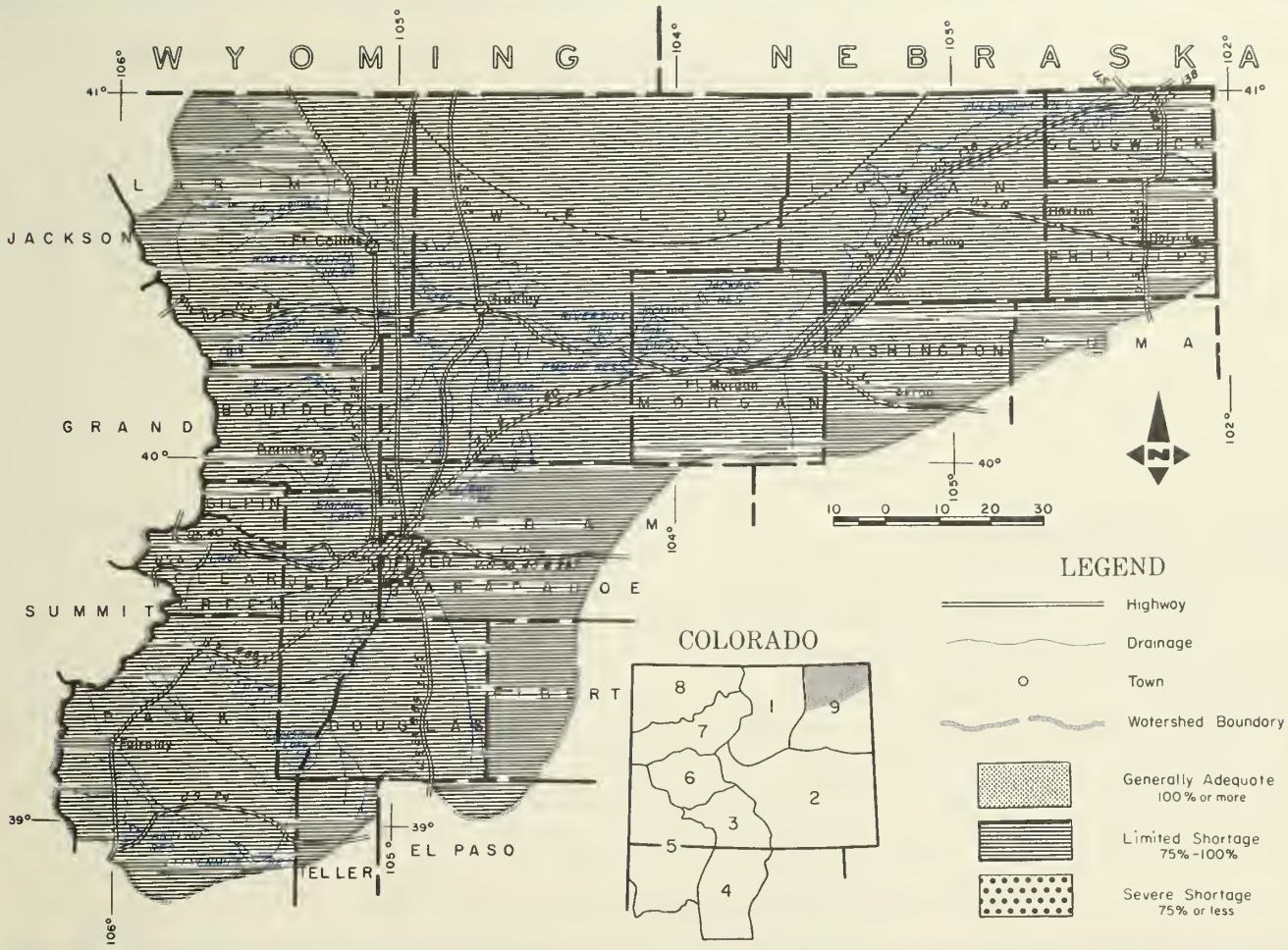

YOUR WATER SUPPLY

SNOWFALL IN THE SOUTH PLATTE BASIN IS BELOW NORMAL EXCEPT ON THE MAINSTEM ABOVE DENVER. SNOWFALL IS NOT SERIOUSLY DEFICIENT AND COULD BE BACK TO NORMAL WITH SEVERAL GOOD SNOWSTORMS. CARRYOVER STORAGE IS SLIGHTLY ABOVE NORMAL AND WILL PROVIDE AN EXCELLENT SUPPLEMENTAL SUPPLY. SOIL MOISTURE CONDITIONS BELOW BRUSH ARE LISTED AS FAIR.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK—STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M. ALT—AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
No numerical forecasts issued until March 1, 1976			

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
South Platte from Greeley to Fort Morgan	Fair	Fair
South Platte from Fort Morgan to Sterling	Fair	Fair
South Platte below Sterling	Fair	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average*
Big Thompson	5	92	88
Boulder	3	75	74
Cache La Poudre	6	97	96
Clear Creek	6	76	84
Saint Vrain	2	78	84
South Platte	2	89	108

RESERVOIR STORAGE (Thousand Ac. Ft.)

END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Carter	109	92	85	77
Cheesman	79	49	41	56
Eleven Mile	98	98	96	87
Empire	38	21	7	26
Horsetooth	144	92	81	86
Jackson	35	20	26	28
Julesburg	28	20	20	20
Point of Rocks	70	58	57	53
Prewitt	33	25	28	16
Riverside	58	41	55	45

* 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1976

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	1/30	34	8.2	8.5	10.4
McIntyre	NS	--	---	---	---
Roach	1/28	44	12.5	9.9	---
North Platte River					
Cameron Pass	1/26	52	16.0	17.8	16.5
Columbine Lodge	1/28	47	12.4	18.5	14.3
Northgate	1/26	16	3.2	3.6	3.8
Park View	1/27	24	5.4	5.5	5.8
Willow Cr. Pass (B)	1/27	28	6.4	7.1	7.7
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	1/28	15	3.1	4.8	5.1
Boulder Falls	1/29	25	6.0	7.6	7.1
University Camp	1/29	32	7.9	10.1	10.9
Big Thompson River					
Deer Ridge	1/28	14	3.2	2.3	2.9
Hidden Valley	1/28	23	5.2	6.1	6.4
Lake Irene (B)	1/26	44	11.4	12.5	13.8
Long's Peak	1/30	19	5.4	6.4	6.0
Two Mile	1/28	30	8.0	8.6	8.6
Cache La Poudre					
Bennett Creek	1/29	19	4.0	3.2	---
Big South	1/28	4	0.8	1.9	1.4
Cameron Pass	1/26	52	16.0	17.8	16.5
Chambers Lake	1/28	23	6.9	6.0	5.6
Deadman Hill	1/30	34	8.2	8.5	10.4
Hourglass Lake	1/29	18	4.2	3.6	---
Joe Wright	1/26	48	12.6	15.5	---
Lost Lake	1/28	30	7.6	7.5	7.7
Red Feather	1/30	19	4.2	3.2	4.0
Clear Creek					
Baltimore (B)	1/28	15	3.1	4.8	5.1
Berthoud Falls	1/28	28	6.2	9.9	8.3
Empire	1/28	17	3.2	5.8	4.5
Grizzly Peak (B)	1/29	38	10.4	12.2	10.6
Loveland Lift	1/29	39	10.6	11.3	12.2
Loveland Pass	1/29	31	8.2	10.7	9.0
St. Vrain River					
Copeland Lake	1/29	9	2.4	3.5	2.8
Ward	1/29	14	3.0	3.4	3.6
Wild Basin	NS	--	---	---	7.2
South Platte River					
Como	1/29	19	5.0	4.9	---
Geneva Park	1/27	16	4.1	2.8	---
Horseshoe Mt.	1/28	27	6.6	8.9	---
Hoosier Pass	1/30	29	8.2	9.6	8.0
Jefferson Creek	1/29	26	6.8	7.2	5.9
Mosquito	1/30	27	6.9	7.8	---
Trout Creek Pass	1/28	14	3.2	4.3	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	1/29	22	4.9	5.6	---
Cooper Hill (B)	1/30	32	8.0	7.4	6.9
East Fork	1/28	27	6.5	6.7	6.0
Four Mile Park	1/31	19	3.5	4.2	3.9
Fremont Pass	1/28	41	11.0	10.6	9.8
Garfield	1/29	24	8.2	11.0	8.5
Hermit Lake	1/28	16	4.5	7.3	---
Monarch Pass	1/29	29	7.8	13.7	10.3
Tennessee Pass	1/31	28	5.4	6.1	6.5
Twin Lakes Tunnel	1/22	26	5.3	4.4	6.0
Westcliffe	1/28	18	4.5	6.5	---
Cucharas River					
Apishapa	1/29	16	5.5	5.3	4.5
Cucharas Creek	1/29	23	6.3	5.8	---
La Veta Pass (B)	1/29	18	3.4	6.6	5.6
Purgatoire River					
Bourbon	1/29	21	4.6	5.2	---
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	1/28	20	4.7	3.2	3.5
Summitville	1/26	37	9.0	10.2	11.9
Conejos River					
Cumbres	1/30	28	7.9	10.6	13.1
La Manga	1/30	33	9.2	8.9	---
Platoro	1/30	30	8.5	8.3	12.5
River Springs	NS	--	---	3.7	4.3
Culebra River					
Brown Cabin	NS	--	---	4.6	---
Cottonwood (B)	NS	--	---	6.4	---
Culebra	1/30	23	5.3	5.8	5.6
La Veta Pass (B)	1/29	18	3.4	6.6	5.6
Trinchera (B)	NS	--	---	5.8	---
Rio Grande					
Cochetopa Pass	1/27	19	4.0	5.0	3.6
Grayback	1/26	34	8.6	7.4	---
Hiway	1/30	33	9.8	16.5	15.6
Lake Humphrey	1/27	23	5.1	5.1	4.8
Love Lake	1/27	23	5.2	7.3	---
Pass Creek	1/30	27	6.4	8.9	8.2
Pool Table	1/27	19	3.2	3.2	5.2
Porcupine	1/30	23	6.0	7.6	8.1
Santa Maria	1/31	12	2.3	5.9	3.3
Upper Rio Grande	1/29	21	4.8	6.7	5.8
Wolf Creek Pass	1/30	37	11.2	19.2	17.4
Wolf Cr. Summit (B)	1/30	39	11.6	19.2	18.5
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela	1/26	14	3.0	3.7	2.5
Rio Chama					
Bateman	1/27	25	5.7	6.1	---
Capulin	1/28	13	3.1	2.7	2.6
Capulin Peak	1/28	14	2.9	3.0	3.5
Chama Divide	1/29	15	3.0	2.0	2.9
Chamita	1/29	24	4.9	5.9	5.5
Rio Grande					
Alamitos	1/26	17	3.3	5.1	---
Big Tesuque	1/28	14	3.6	3.4	4.0
Cordova	NS	--	---	---	6.2
Elk Cabin	1/29	10	2.3	4.7	2.7
Hopewell	1/28	34	10.0	7.8	---
La Cueva	1/27	11	2.7	3.1	---
Pajarito	1/27	2	0.3	0.6	0.3
Pajarito Peak	1/27	3	0.4	2.0	1.1
Palo	1/27	26	6.9	5.0	---
Payrole	1/30	20	4.3	5.0	6.1
Quemazon	1/29	16	2.9	---	6.1
Rio En Medio	1/28	23	5.1	5.0	6.0
Sandoval	1/29	6	1.0	3.9	3.5
Senorita Divide	1/27	18	3.9	4.1	---
Taos Canyon	1/27	22	6.8	3.8	2.7
Tres Ritos	1/26	20	4.0	4.4	3.3
Rio Hondo					
Taos Powderhorn	1/28	46	15.0	13.6	---
Red River					
Hematite Park (B)	1/26	18	4.6	2.1	2.9
Red River	1/26	17	5.2	2.3	3.7
Red River #2	1/27	22	6.3	4.1	---

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1976

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES) LAST YEAR	WATER CONTENT (INCHES) AVG 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	1/29	26	7.4	9.6	8.0
Lemon	1/30	22	5.4	7.4	---
Mineral Creek	1/29	29	8.0	13.0	9.9
Molas Lake	1/29	24	7.0	10.1	8.7
Purgatory	1/29	34	10.3	15.2	---
Red Mt. Pass (B)	1/29	56	16.7	23.0	19.0
Silverton Sub-Sta.	1/29	21	6.2	8.1	5.6
Spud Mountain	1/29	30	13.0	18.3	15.2
Dolores River					
Lizard Head	1/29	30	7.0	11.4	10.4
Lone Cone	1/29	42	12.2	10.6	11.8
Ophir Loop	1/28	30	7.0	---	---
Rico	1/29	18	3.8	5.4	5.6
Telluride	1/28	25	5.2	7.0	4.7
Trout Lake	1/28	31	7.3	11.2	8.1
San Juan River					
Chama Divide (B)	1/29	14	3.0	2.0	2.9
Chamita (B)	1/29	24	4.9	5.9	5.5
Upper San Juan	1/30	41	12.8	21.6	19.1
Wolf Cr. Pass (B)	1/30	37	11.2	19.2	17.4
Wolf Cr. Summit	1/30	39	11.6	19.2	18.5
GUNNISON BASIN					
Gunnison River					
Alexander Lake	1/30	33	9.6	11.3	12.7
Blue Mesa	NS	--	---	---	---
Butte	1/29	30	7.8	9.7	---
Cochetopa Pass (B)	1/27	19	4.0	5.0	3.6
Crested Butte	1/29	35	8.2	8.7	7.4
Keystone	1/29	38	9.8	13.7	13.1
Lake City	1/28	20	4.1	5.3	---
Mesa Lakes (B)	1/29	31	6.6	11.3	10.5
McClure Pass	1/28	32	8.5	10.8	11.1
Park Cone	1/27	28	6.0	5.9	6.1
Park Reservoir	1/28	45	11.1	12.8	14.6
Porphyry Creek	1/29	33	8.5	13.0	10.0
Tomichi	1/29	26	6.4	10.7	8.1
Surface Creek					
Alexander Lake	1/30	33	9.6	11.3	12.7
Mesa Lakes	1/29	31	6.6	11.3	10.5
Park Reservoir	1/28	45	11.1	12.8	14.6
Uncompahgre River					
Ironton Park	1/30	34	8.8	12.4	8.0
Red Mountain Pass	1/29	56	16.7	23.0	19.0
Telluride (B)	1/28	25	5.2	7.0	4.7
COLORADO BASIN					
Blue River					
Blue River	1/30	24	5.6	5.9	5.2
Fremont Pass	1/28	41	11.0	10.6	9.8
Frisco Pass	1/29	20	4.9	5.4	4.4
Grizzly Peak	1/29	38	10.4	12.2	10.6
Hoosier Pass (B)	1/30	29	8.2	9.6	8.0
Shrine Pass	1/28	38	9.1	11.9	10.3
Snake River	1/29	23	5.4	4.4	5.2
Summit Ranch	1/28	18	3.9	3.9	---

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES) LAST YEAR	WATER CONTENT (INCHES) AVG 58-72
Colorado River					
Arrow	1/28	31	9.1	8.6	7.5
Berthoud Pass	1/28	33	7.4	10.6	9.4
Berthoud Summit	1/28	38	9.6	13.3	11.4
Cooper Hill	1/30	32	8.0	7.4	6.9
Fiddler Gulch	NS	--	---	---	9.0
Glenmar Ranch	1/27	24	4.9	5.4	5.1
Gore Pass	1/28	27	6.2	8.6	6.2
Grand Lake	1/26	27	5.2	5.2	4.9
Lake Irene	1/26	44	11.4	12.5	13.8
Lapland	1/27	25	5.4	7.0	6.6
Lulu	NS	--	---	---	---
Lynx Pass	1/28	30	6.8	9.0	7.6
McKenzie Gulch	1/29	20	3.8	4.0	4.1
Middle Fork	1/27	24	5.6	6.3	5.7
Milner	1/26	30	7.3	8.7	---
North Inlet	1/25	22	5.0	7.0	5.1
Pando	1/28	26	6.2	5.3	6.0
Phantom Valley	1/26	25	5.5	7.5	6.5
Ranch Creek	1/28	24	6.0	5.7	5.6
Tennessee Pass (B)	1/31	28	5.4	6.1	6.5
Vail Pass	Destroyed		---	10.5	10.4
Vasquez	1/28	32	9.0	7.7	7.7
Roaring Fork					
Aspen	1/28	40	10.3	10.9	10.0
Independence Pass	1/22	32	7.9	11.1	9.7
Ivanhoe	1/27	40	9.6	11.4	10.2
Kiln	1/27	31	6.8	8.0	---
Lift	1/28	34	10.3	10.1	10.1
McClure Pass	1/28	32	8.5	10.8	11.1
Nast	1/27	20	3.8	5.1	4.3
North Lost Trail	1/28	29	6.7	10.6	10.0
Williams Fork River					
Glenmar Ranch	1/27	24	4.9	5.4	5.1
Jones Pass	1/30	34	7.4	9.2	8.7
Middle Fork	1/27	24	5.6	6.3	5.7
Willow Creek					
Granby	1/27	23	5.2	4.2	4.7
Willow Cr. Pass	1/27	28	6.4	7.1	7.7
Plateau Creek					
Mesa Lakes	1/29	31	6.6	11.3	10.5
Park Reservoir	1/28	45	11.1	12.8	14.6
Trickle Divide	1/28	48	12.3	13.2	16.0
YAMPA BASIN					
Elk River					
Elk River #2	1/27	47	12.6	11.4	11.4
Hahn's Peak	1/27	40	10.0	10.1	---
White River					
Burro Mountain	1/29	37	7.0	13.2	11.5
Rio Blanco	1/28	33	8.2	9.5	9.0
Yampa River					
Bear River	NS	--	---	---	---
Columbine (B)	1/28	47	12.4	18.5	14.3
Crosho	NS	--	---	---	---
Dry Lake	1/29	41	10.4	14.8	12.0
Lynx Pass (B)	1/28	30	6.8	9.0	7.6
Rabbit Ears	1/28	52	13.0	20.2	16.1
Tower	1/29	81	24.4	33.4	---
Yampa View	1/28	36	8.9	13.4	9.8

NOTE: NS - No Survey
(B) - On Adjacent Drainage

GPO 833-501

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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Collaborating with
COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
MAR. 1, 1976

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SURVEYOR ENROUTE TO THE MT. BALDY ARIZONA SNOW COURSE
SCS PHOTO AZ-5460

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA-SCS-PORTLAND, OREG 1979

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

M. D. BURDICK

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

ALBERT W. HAMELSTROM

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN

DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
BERNARD A. SHAFER, Assistant Snow Survey Supervisor
JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Loke County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baco, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sonchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes wa ter supply conditions in Upper Chamo, East Rio Arriba, Toos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LoPlata, Pine River, San Juan, Son Miguel Basin, ond Glode Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimorron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Ploteou Valley, Lower Grond Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Pork, White River, and Douglas Creek Soil Conservation Districts.

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WATER SUPPLY OUTLOOK

as of

MARCH 1, 1976

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
MARCH 1, 1976

COLORADO AND NEW MEXICO BOTH PICKED UP SUBSTANTIAL AMOUNTS OF SNOW DURING THE MONTH OF FEBRUARY. HEAVY AMOUNTS WERE RECEIVED IN THE SAN JUAN MOUNTAIN RANGE OF SOUTHERN COLORADO AND NEAR TO SLIGHTLY ABOVE AVERAGE AMOUNTS IN OTHER LOCATIONS. THE WATER SUPPLY OUTLOOK HAS IMPROVED OVER LAST MONTH. A DRAMATIC INCREASE IN PROJECTED WATER SUPPLY OF NEARLY FORTY PERCENT OF AVERAGE IS INDICATED FOR SOME SOUTHERN COLORADO STREAMS. THE MOUNTAIN SNOWPACK COULD CONTINUE TO ACCUMULATE FOR AT LEAST ANOTHER MONTH AT HIGHER ELEVATIONS. SOIL MOISTURE IS RATED AS FAIR TO POOR IN IRRIGATED AREAS. RESERVOIR STORAGE IS NEAR NORMAL.

COLORADO -- THE SNOWPACK IS NEAR AVERAGE OVER MOST OF THE STATE WITH TWO EXCEPTIONS. THE SAN JUAN MOUNTAINS ARE ABOUT 20 PERCENT ABOVE AVERAGE WHICH IS QUITE A JUMP FROM THE FIRST OF FEBRUARY WHEN SNOWPACK WAS ABOUT 25 PERCENT BELOW NORMAL. THE HEADWATERS OF THE ST. VRAIN, BOULDER RIVER, AND CLEAR CREEK ARE ABOUT 20 PERCENT BELOW AVERAGE. LARGEST AMOUNTS OF SNOW WERE RECEIVED IN THE SOUTH DECREASING NORTHWARD. PROJECTED IRRIGATION WATER SUPPLIES HAVE IMPROVED OVER NEARLY THE ENTIRE STATE. THE DRY LANDS OF EASTERN COLORADO REMAIN DRY.

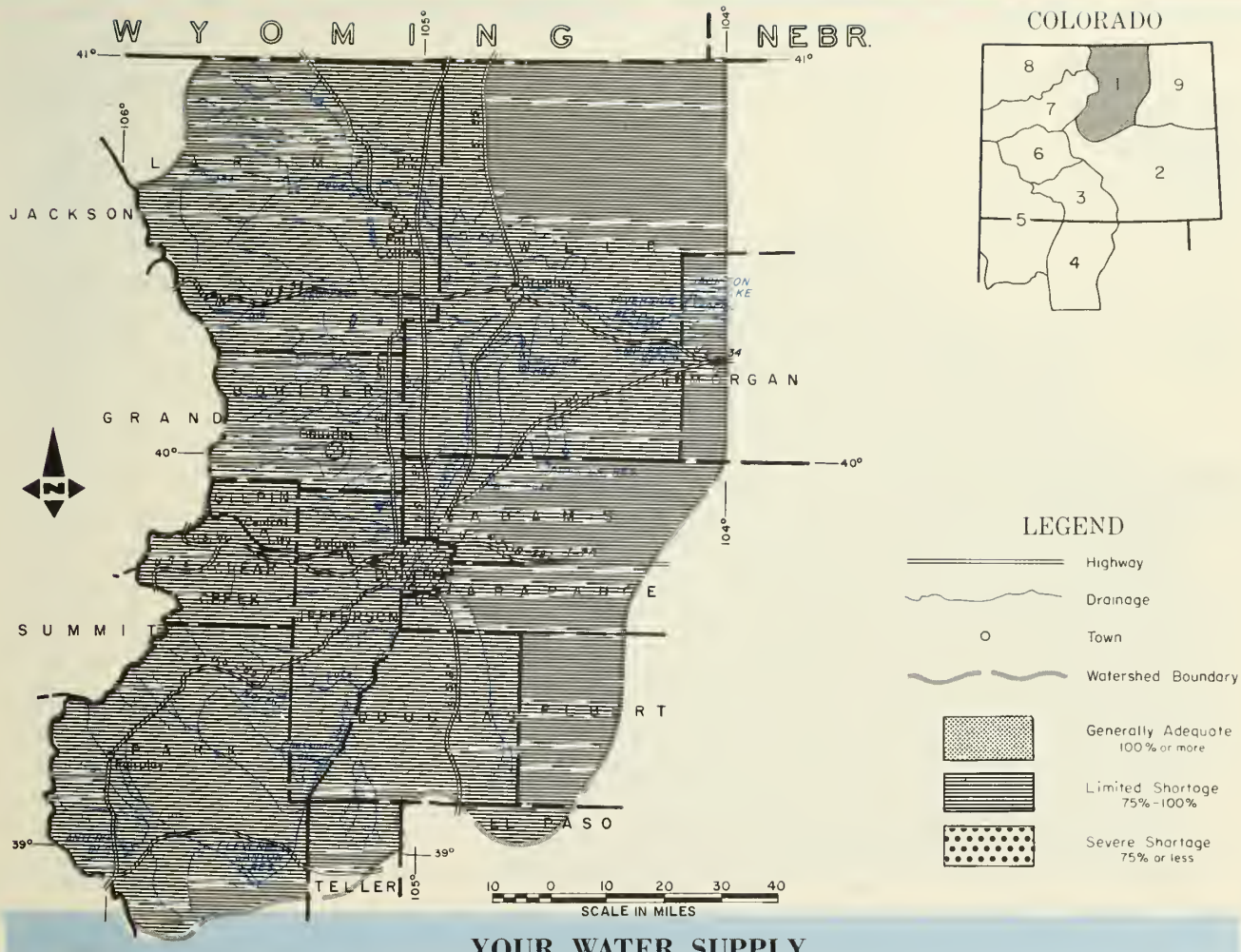
NEW MEXICO -- BOTH SNOWPACK AND EXPECTED STREAMFLOW HAVE IMPROVED OVER LAST MONTH. A SERIES OF STORMS DEPOSITED ABOVE AVERAGE QUANTITIES OF SNOW BRINGING THE MOUNTAIN SNOWPACK TO NEAR AVERAGE OR ABOVE IN MOST AREAS. FORECASTS OF IRRIGATION WATER SUPPLIES HAVE IMPROVED OVER LAST MONTH. SOIL MOISTURE IN VALLEY AREAS IS RATED AS POOR. RESERVOIR STORAGE IS MUCH ABOVE AVERAGE IN SOME RESERVOIRS AND MUCH BELOW IN OTHERS.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE SOUTH PLATTE REMAINS SIMILAR TO LAST MONTH AND NEAR NORMAL. STREAMFLOW FORECASTS RANGE FROM 79% OF THE 15-YEAR NORMAL ON CLEAR CREEK TO 97% ON THE CACHE LA POUDRE. SOIL MOISTURE IN THE IRRIGATED AREAS OF THE SOUTH PLATTE IS LISTED AS POOR TO FAIR. CARRYOVER STORAGE IS SLIGHTLY ABOVE NORMAL. WATER SUPPLIES SHOULD BE NEAR NORMAL THIS SUMMER.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A. MOSS - AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

RODNEY M ALT - AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Big Thompson River at Drake (1)	103	96	107
Boulder Creek at Orodell	39	80	49
Cache La Poudre River at Canyon Mouth (2)	240	97	247
Clear Creek at Golden (3)	100	79	127
St. Vrain Creek at Lyons (4)	65	87	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Avg.	Fair
Coal Creek	Fair	Fair
North Fork of South Platte	Avg.	Fair
North Fork of Cache La Poudre	Avg.	Fair
Ralston Creek	Fair	Fair
Rock Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Big Thompson	5	100	98
Boulder	3	70	71
Cache La Poudre	7	104	94
Clear Creek	6	77	82
Saint Vrain	3	80	82
South Platte	3	80	104

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Antero	33	16	16	14
Barr Lake	32	26	27	23
Black Hollow	8	5	5	4
Boyd Lake	44	39	37	37
Cache La Poudre	10	6	7	8
Carter Lake	109	92	100	87
Chambers Lake	9	2	3	3
Cheesman	79	46	43	57
Cobb Lake	34	15	17	15
Eleven Mile	98	97	97	87
Fossil Creek	12	6	6	7
Gross	43	19	23	29
Halligan	6	5	5	4
Horsetooth	144	111	90	97
Lake Loveland	14	9	10	9
Lone Tree	9	5	5	7
Mariano	5	5	5	5
Marshall	10	5	6	4
Marston	18	15	16	15
Milton	24	16	15	13
Standley	42	31	27	17
Terry	8	6	6	5
Union	13	11	12	10
Windsor	19	13	11	10

* 1958-1972 period.

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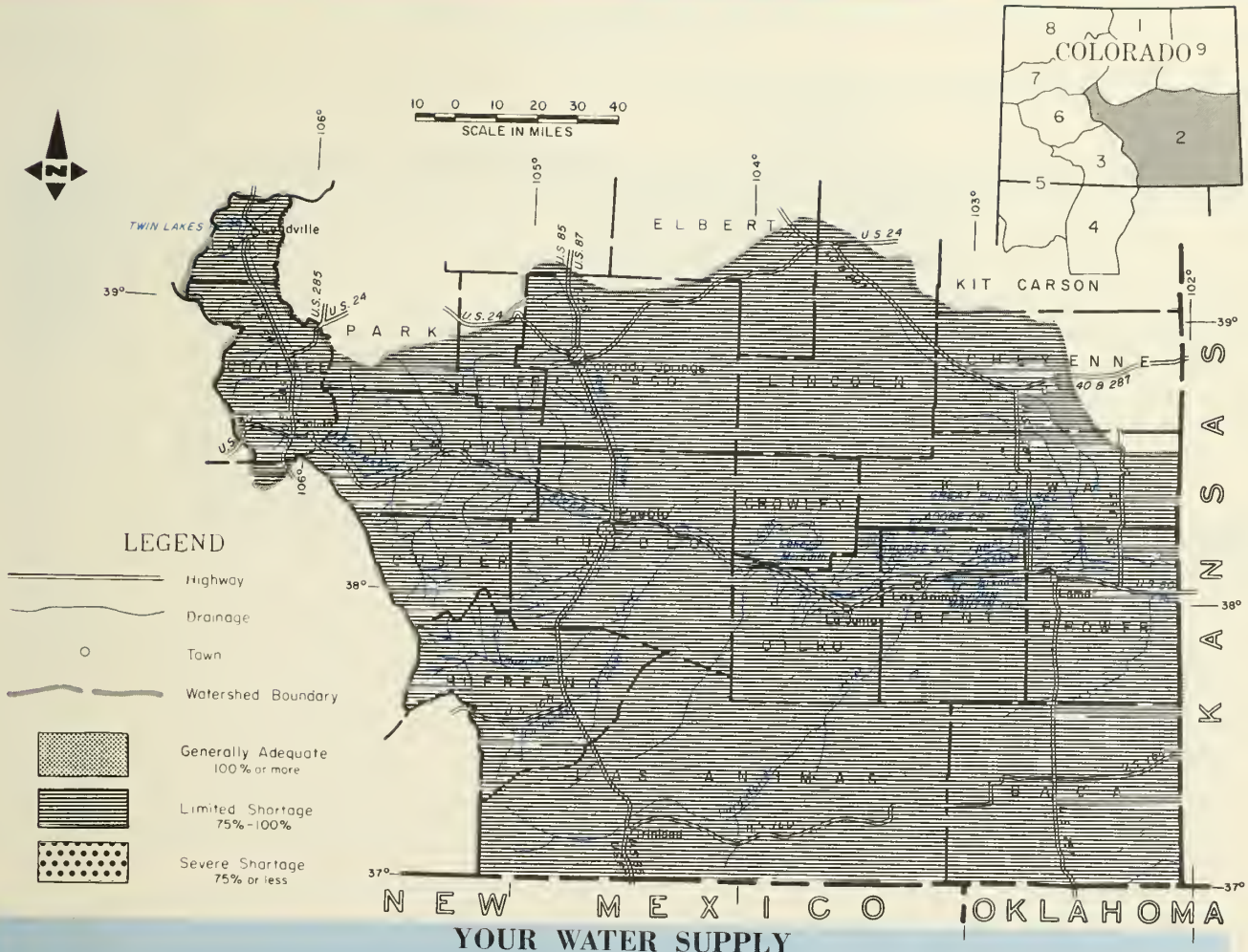
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO
as of
MARCH 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE ARKANSAS DRAINAGE REMAINS ABOUT THE SAME AS LAST MONTH AND NEAR NORMAL. STREAMFLOW SHOULD BE IN THE NEAR NORMAL RANGE. THE PURGATOIRE SHOULD FLOW ABOUT 90% AND THE ARKANSAS MAINSTEM ABOUT 105%. AREAS ABOVE PUEBLO ARE REPORTING FAIR SOIL MOISTURE; THOSE BELOW PUEBLO, POOR CONDITIONS. CARRYOVER STORAGE IS POOR AND WILL BE OF LIMITED VALUE IN AUGMENTING SUPPLIES.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A MOSS AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D W GILLASPIE AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Arkansas River near Pueblo (1)	310	107	290
Arkansas River at Salida (1)	335	107	313
Cucharas River near La Veta	9	90	10
Huerfano River near Redwing	14	93	15
Purgatoire River at Trinidad	34	89	38

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Apishapa River	Avg.	Avg.
Fountain Creek	Avg.	Avg.
Grape Creek	Avg.	Fair
Hardscrabble Creek	Avg.	Fair
Monument Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Arkansas	9	80	99
Cucharas	1	70	83
Purgatoire	1	88	98

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Adobe	62	0	0	17
Clear Creek	11	5	3	8
Cucharas	40	0	0	3
Great Plains	150	0	0	59
Horse Creek	27	12	0	7
John Martin	354	9	7	90
Meredith	42	0	0	13
Model	15	0	0	4
Turquoise	121	50	38	--
Twin Lakes	58	17	17	26

* 1958-1972 period.

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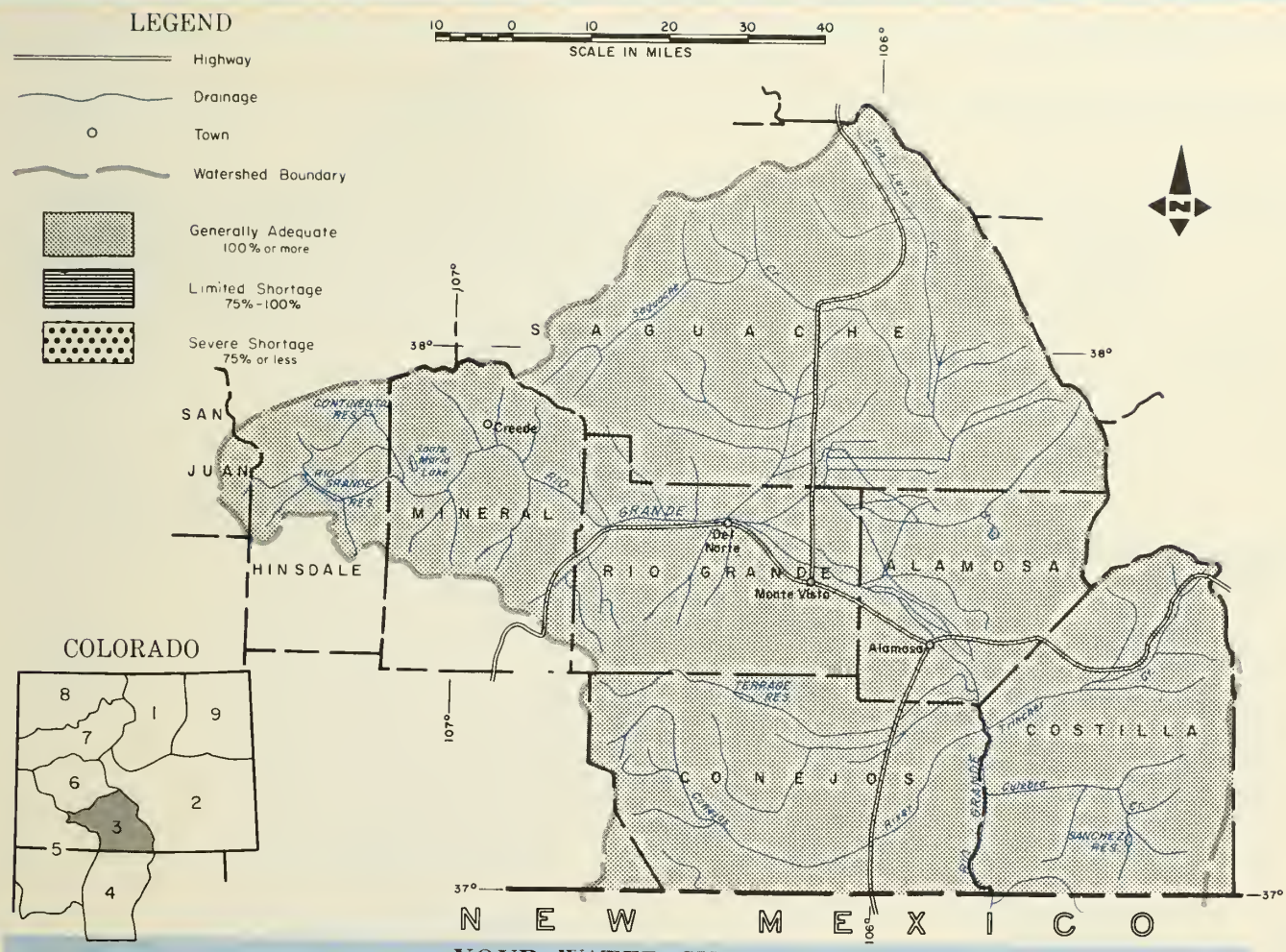
"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

MARCH 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE RIO GRANDE WAS VASTLY IMPROVED BY THE FEBRUARY SNOW STORMS. FEBRUARY 1 SNOWPACK WAS 70 TO 80% OF NORMAL AND NOW RANGES FROM 90 TO 130%. THIS IMPROVES THE WATER SUPPLY OUTLOOK MATERIALLY. IT NOW APPEARS THAT THERE SHOULD BE AT LEAST NORMAL WATER SUPPLIES OVER THE ENTIRE BASIN. CARRYOVER STORAGE IS ABOUT NORMAL.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

D W GILLASPIE – AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	* Average
Alamosa Creek above Terrace Reservoir	78	126	62
Conejos River near Mogote (1)	196	106	184
Culebra Creek at San Luis (2)	15	86	17
Rio Grande at 30 Mile Bridge (3)	125	103	121
Rio Grande near Del Norte (3)	540	116	467
South Fork of Rio Grande at South Fork	140	122	115

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Avg.	Fair
Sangre de Cristo Cr.	Fair	Poor
Trinchera Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Alamosa	2	119	129
Conejos	3	95	105
Culebra	2	76	86
Rio Grande	10	95	114

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average *
Continental	27	5	3	5
Platoro	60	--	19	9
Rio Grande	46	17	8	17
Sanchez	103	--	5	13
Santa Maria	45	9	4	6
Terrace	18	9	8	6

* 1958-1972 period.

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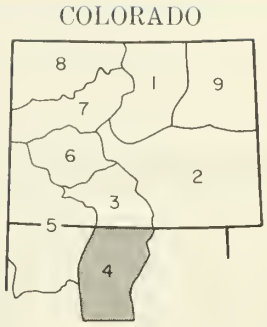
The Conservation of Water begins with the Snow Survey

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO
as of

MARCH 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100 % or more
- Limited Shortage 75% - 100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

THE MOUNTAIN SNOWPACK SHOWED SOME IMPROVEMENT OVER LAST MONTH. ALL WATERSHEDS HAVE NEAR TO ABOVE AVERAGE SNOW. AS A RESULT STREAMFLOW IS EXPECTED TO BE NEAR TO SLIGHTLY ABOVE NORMAL ON MOST DRAINAGES. SOIL MOISTURE IS REPORTED AS POOR. CARRYOVER RESERVOIR STORAGE VARIES WIDELY FROM NEAR HALF OF NORMAL TO MUCH ABOVE NORMAL.

This report prepared by

JACK N WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

A W HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE NEW MEXICO

JAMES E TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) March—July

FORECAST POINT	FORE-CAST	% of Average	Average *
Costilla Creek at Costilla (1)	16	84	19
Jemez River near Jemez	24	83	29
Pecos River at Pecos	50	122	41
Red River at Mouth near Questa	35	121	29
Rio Chama at El Vado	210	110	190
Rio Grande at Otowi (2)	575	109	526
Rio Grande at San Marcial (2)	390	110	355
Rio Hondo near Valdez	14	100	14
Santa Cruz River at Cundiyo	11	85	12

(1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo Creek	Exc.	Avg.
Mora River	Avg.	Avg.
Nambe Creek	Avg.	Avg.
Rio Ojo Caliante	Avg.	Fair
Rio Pueblo de Taos	Exc.	Avg.
Santa Fe Creek	Fair	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Pecos			
Red River	2	111	163
Rio Chama	5	76	111
Rio Grande, NM	11	68	102
Rio Hondo	--	--	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Alamogordo	111	37	45	79
Avalon	5	3	5	--
Caballo	344	45	43	87
Conchas	273	84	132	186
El Vado	195	126	89	3
Elephant Butte	2195	716	465	439
McMillan	34	6	32	--

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

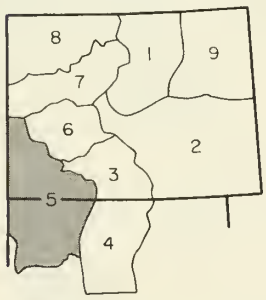
as of
MARCH 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

COLORADO



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SCALE IN MILES

YOUR WATER SUPPLY

THE MOUNTAIN SNOWPACK SHOWED A MARKED IMPROVEMENT FROM LAST MONTH. SEVERAL LARGE STORMS DUMPED ABOVE AVERAGE AMOUNTS OF SNOW DURING FEBRUARY. AS A RESULT THE WATER SUPPLY PICTURE IS NEAR 20% ABOVE NORMAL ON MOST WATERSHEDS. SOIL MOISTURE IS FAIR IN VALLEY AREAS. RESERVOIR STORAGE IS NEAR NORMAL.

This report prepared by

JACK N WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK—STATE CONSERVATIONIST
DENVER, COLORADO

A W HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D. W GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Animas River at Durango	460	109	423
Dolores River at Dolores	270	116	232
La Plata River at Hesperus	28	117	24
Los Pinos River at Bayfield (1)	215	109	198
Mancos River near Towac	16	114	14
Inflow to Navajo River (1 & 2)	675	113	597
Piedra Creek at Arboles	218	118	185
San Juan River at Carracas	404	114	354
San Miguel River at Placerville	135	104	130

(1) Observed flow plus change in storage in Vallicito Reservoir. (2) April – July

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida River	Avg.	Avg.
Hermosa Creek	Exc.	Avg.
West Dolores River	Avg.	Avg.
Williams Creek	Avg.	Avg.

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Groundhog	22	9	9	9
Jackson Gulch	10	6	3	4
Lemon	40	19	2	19
Navajo	1696	1100	938	1203
Vallecito	126	55	24	54

*Less than 15 yrs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Animas	6	96	120
Dolores	4	82	106
San Juan	5	103	121

* 1958-1972 period.

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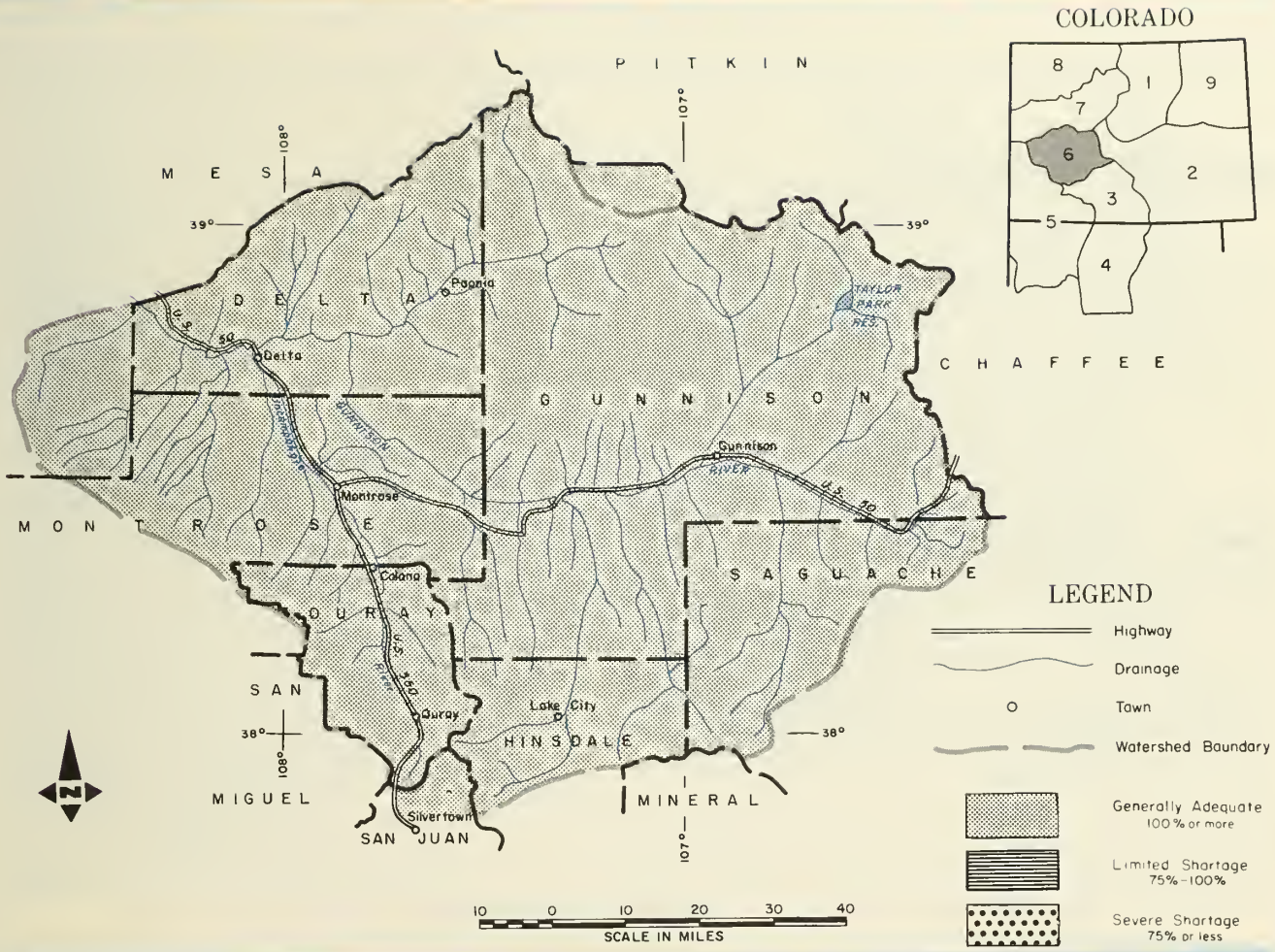
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK IS NEAR AVERAGE ON ALL WATERSHEDS AND IS A MARKED IMPROVEMENT OVER LAST MONTH'S REPORT. WATER SUPPLIES ARE EXPECTED TO BE NEAR NORMAL. SOIL MOISTURE AT VALLEY LOCATIONS IS REPORTED AS FAIR. CARRYOVER STORAGE IS EXCELLENT.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Gunnison River inflow to Blue Mesa Reservoir (1)	825	104	792
Gunnison River near Grand Junction (2)	1175	99	1184
North Fork of Gunnison (3)	280	106	263
Surface Creek near Cedaredge	16	100	16
Uncompahgre River at Colona	140	104	134

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ohio Creek	Avg.	Avg.
Slate River	Avg.	Avg.
Taylor River	Avg.	Avg.
Tomichi Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Gunnison	12	88	100
Surface Creek	3	101	102
Uncompahgre	3	84	110

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Blue Mesa	830	440	380	354
Morrow Point	121	115	115	109
Taylor	106	62	50	65

* 1958-1972 period.

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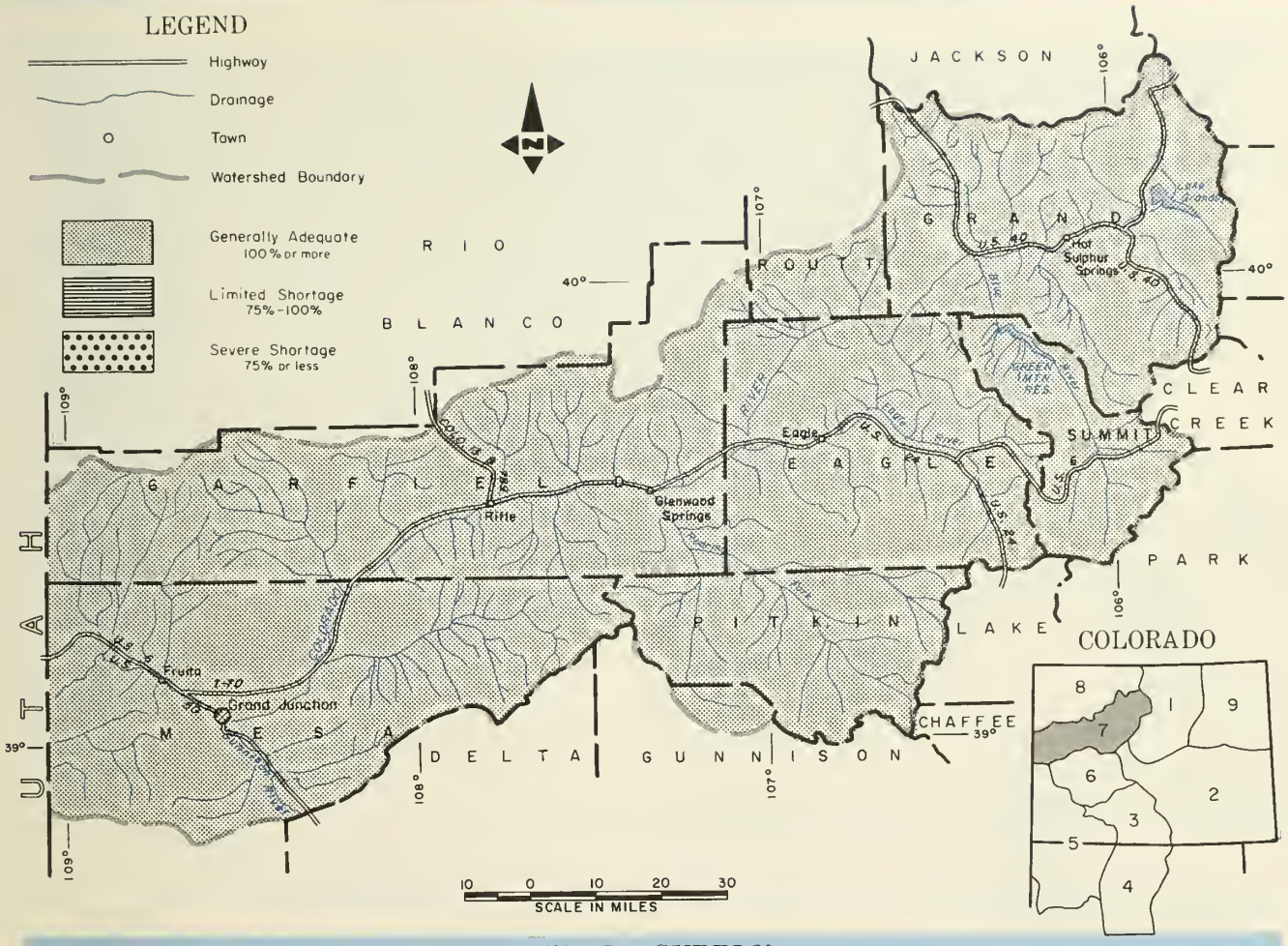
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

MARCH 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK RANGES FROM 91% OF NORMAL ON WILLIAMS FORK DRAINAGE TO 105% ON THE ROARING FORK. THIS IS A SLIGHT IMPROVEMENT OVER LAST MONTH'S REPORT. WATER SUPPLIES ARE EXPECTED TO VARY NEAR NORMAL ON ALL WATERSHEDS IF NORMAL PRECIPITATION IS RECEIVED THE REMAINDER OF THE WINTER. CARRYOVER STORAGE IS SLIGHTLY ABOVE AVERAGE. SOIL MOISTURE AT VALLEY LOCATIONS IS REPORTED AS FAIR.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Blue River inflow to Dillon Reservoir	155	92	169
Blue River inflow to Green Mountain Reservoir (1)	290	98	297
Colorado River near Cameo (6)	2300	97	2370
Colorado River near Dotsero (3)	1400	98	1434
Colorado River inflow to Granby Reservoir (2)	220	96	228
Roaring Fork at Glenwood Springs (4)	715	100	713
Williams Fork near Parshall (5)	55	87	63
Willow Creek inflow to Willow Creek Reservoir	45	96	47

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Avg.	Avg.
Eagle River	Avg.	Avg.
Gypsum Creek	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Blue River	8	89	95
Colorado	18	87	93
Plateau	3	108	106
Roaring Fork	7	99	105
Williams Fork	3	81	91
Willow	2	102	103

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Dillon	254	226	211	233
Granby	466	299	308	235
Green Mountain	139	76	70	67
Homestake	43	0	33	17
Ruedi	101	61	61	65
Vega	32	13	7	11
Williams Fork	97	48	38	29
Willow Creek	9	7	7	7

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
MARCH 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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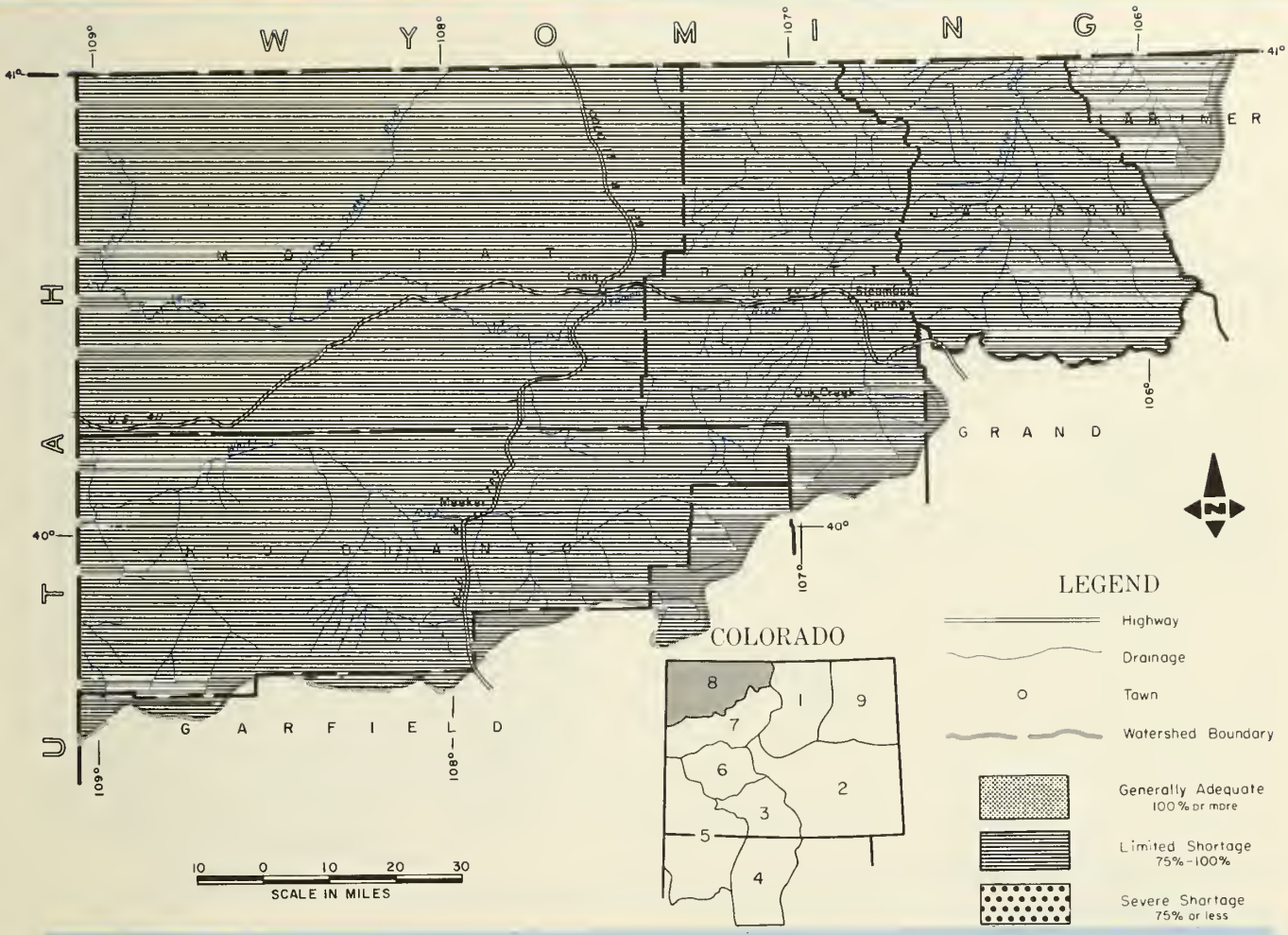

YOUR WATER SUPPLY

SNOWPACK IS NEAR TO SLIGHTLY BELOW AVERAGE OVER ALL WATERSHEDS. THE SITUATION REMAINS ABOUT THE SAME AS LAST MONTH. THE STORMS WHICH DEPOSITED LARGE AMOUNTS OF SNOW IN SOUTHERN AND CENTRAL COLORADO DID NOT BRING COMPARABLE AMOUNTS TO NORTHERN COLORADO. WATER SUPPLIES SHOULD BE NEAR NORMAL TO 20% BELOW NORMAL. SOIL MOISTURE IS LISTED AS FAIR FOR VALLEY LOCATIONS.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Elk River at Clark	180	91	198
Laramie River near Woods	127	100	127
Little Snake River at Lily	330	102	324
North Platte River at Northgate	225	94	240
White River near Meeker	270	92	295
Yampa River near Maybell	750	83	905
Yampa River at Steamboat Springs	225	83	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Avg.	Avg.
Hunt Creek	Avg.	Fair
Illinois River	Avg.	Avg.
Michigan River	Avg.	Avg.
Oak Creek	Avg.	Fair
Trout Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Elk	1	95	92
Laramie	2	118	97
North Platte	5	93	95
White	2	74	88
Yampa	5	72	83

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
MARCH 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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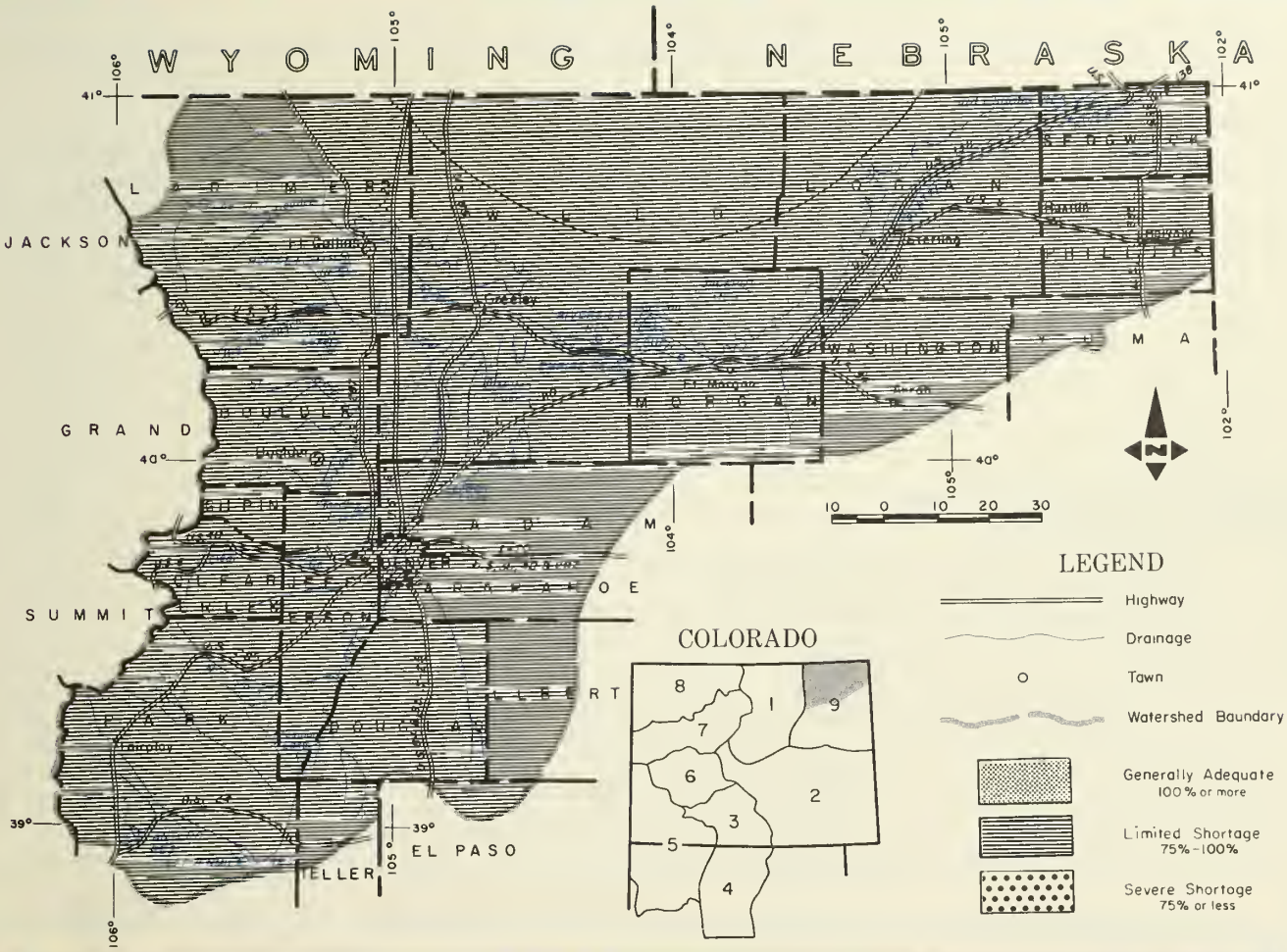

YOUR WATER SUPPLY

SNOWFALL DURING FEBRUARY WAS ABOUT NORMAL. CURRENT SNOWPACK RANGES FROM 70% TO 104% OF THE 15-YEAR AVERAGE. FORECASTS ARE FOR SLIGHTLY LESS THAN NORMAL STREAMFLOW. CARRYOVER STORAGE IS 105% ABOVE NORMAL AND WILL PROVIDE EXCELLENT SUPPLEMENTAL SUPPLIES. SOIL MOISTURE CONDITIONS ARE REPORTED AS POOR TO FAIR.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M. ALT – AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	103	96	107
Boulder Creek at Orodell	39	80	49
Cache La Poudre River at Canyon Mouth (2)	240	97	247
Clear Creek at Golden (3)	100	79	127
Saint Vrain Creek at Lyons (4)	65	87	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Avg.	Fair
South Platte from Fort Morgan to Sterling	Avg.	Fair
South Platte below Sterling	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average*
Big Thompson	5	100	98
Boulder	3	70	71
Cache La Poudre	7	104	94
Clear Creek	6	77	82
Saint Vrain	3	80	82
South Platte	3	80	104

RESERVOIR STORAGE (Thousand Ac. Ft.)

END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average*
Carter	109	92	100	87
Cheesman	79	46	43	57
Eleven Mile	98	97	97	87
Empire	38	32	15	30
Horsetooth	144	111	90	97
Jackson	35	29	32	32
Julesburg	28	20	20	20
Point of Rocks	70	70	64	59
Prewitt	33	25	26	18
Riverside	58	46	52	53

* 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1976

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	2/25	42	11.1	10.4	14.1
McIntyre	NS	--	---	---	---
Roach	2/26	57	17.1	13.4	14.9
North Platte River					
Cameron Pass	2/25	61	22.6	21.6	22.5
Columbine Lodge	2/26	58	17.8	24.2	20.4
Northgate	2/25	20	4.7	4.5	5.5
Park View	2/26	31	7.8	7.5	7.8
Willow Cr. Pass (B)	2/26	38	10.3	10.2	10.4
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	2/26	15	3.7	6.3	6.2
Boulder Falls	2/26	31	7.3	10.4	10.3
University Camp	2/26	42	11.4	15.1	15.1
Big Thompson River					
Deer Ridge	2/28	12	3.0	4.3	4.0
Hidden Valley	2/25	35	10.1	7.7	8.1
Lake Irene (B)	2/27	54	17.2	17.3	19.0
Long's Peak	2/27	31	8.8	9.5	8.5
Two Mile	2/25	40	11.0	11.6	11.9
Cache La Poudre					
Bennett Creek	2/26	23	5.6	4.3	---
Big South	2/27	1	0.2	1.2	2.3
Cameron Pass	2/25	61	22.6	21.6	22.5
Chambers Lake	2/27	27	8.7	8.7	8.1
Deadman Hill	2/25	42	11.1	10.4	14.1
Hourglass Lake	2/26	23	5.8	4.6	5.3
Joe Wright	2/25	7	18.7	18.9	---
Lost Lake	2/27	35	10.0	9.8	10.2
Red Feather	2/25	21	5.5	4.8	5.4
Clear Creek					
Baltimore (B)	2/26	15	3.7	6.3	6.2
Berthoud Falls	2/26	35	9.3	13.7	11.6
Empire	2/26	22	5.6	8.0	6.0
Grizzly Peak (B)	2/26	44	12.7	15.1	14.6
Loveland Lift	2/25	43	12.9	14.3	16.9
Loveland Pass	2/26	40	11.9	15.1	12.7
St. Vrain River					
Copeland Lake	2/28	11	3.0	5.4	3.8
Ward	2/25	19	3.8	4.1	4.8
Wild Basin	2/28	30	8.3	9.4	9.9
South Platte River					
Como	2/27	23	5.7	6.7	---
Geneva Park	2/26	19	4.1	4.2	3.3
Horseshoe Mt.	2/26	33	8.1	11.8	---
Hoosier Pass	3/01	37	10.2	12.9	10.6
Jefferson Creek	2/27	30	8.1	10.8	7.6
Mosquito	2/27	34	8.5	11.3	---
Trout Creek Pass	2/26	18	3.8	5.2	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	2/25	18	5.8	7.1	5.1
Cooper Hill (B)	3/02	41	10.2	9.7	9.0
East Fork	2/26	33	9.4	8.5	8.0
Four Mile Park	2/28	24	5.3	6.2	5.1
Fremont Pass	2/26	49	14.4	13.4	12.9
Garfield	2/25	31	8.4	14.6	11.3
Hermit Lake	2/26	25	7.0	12.0	---
Monarch Pass	2/25	40	11.6	18.6	14.0
Tennessee Pass	2/27	36	8.7	9.6	8.7
Twin Lakes Tunnel	2/25	35	8.4	11.5	8.9
Westcliffe	2/26	25	7.0	10.6	6.0
Cucharas River					
Apishapa	2/26	19	5.9	6.9	---
Cucharas Creek	2/26	26	6.8	8.2	---
La Veta Pass (B)	2/26	22	6.0	8.5	7.2
Purgatoire River					
Bourbon	2/26	24	5.8	6.6	5.9
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	2/27	30	7.9	6.1	5.1
Summitville	2/23	68	17.6	15.4	14.7
Conejos River					
Cumbres	2/27	54	16.5	17.9	16.5
La Manga	2/27	59	16.9	16.6	---
Platoro	2/28	54	15.7	13.8	13.9
River Springs	2/26	22	4.9	7.3	5.0
Culebra River					
Brown Cabin	2/27	12	3.1	6.3	---
Cottonwood (B)	NS	--	---	----	---
Culebra	2/25	30	6.5	8.0	7.4
La Veta Pass (B)	2/26	22	6.0	8.5	7.2
Trinchera (B)	2/28	28	7.0	6.7	---
Rio Grande					
Cochetopa Pass	2/24	22	4.9	7.5	4.8
Grayback	2/23	57	14.9	13.2	---
Hiway	2/26	79	23.4	26.4	19.5
Lake Humphrey	2/26	36	8.5	6.5	6.1
Love Lake	2/25	40	10.2	10.0	---
Pass Creek	2/26	46	13.4	12.0	9.9
Pool Table	2/25	25	4.8	4.2	6.0
Porcupine	2/28	30	9.4	11.5	9.1
Santa Maria	2/29	18	4.2	7.0	4.1
Upper Rio Grande	2/28	33	7.4	9.9	7.6
Wolf Creek Pass	2/26	86	26.6	22.3	22.0
Wolf Cr. Summit (B)	2/26	86	25.0	27.5	22.5
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela				4.5	3.3
Rio Chama					
Bateman	2/24	37	9.9	13.6	9.3
Capulin	2/26	8	2.5	6.0	3.7
Capulin Peak	2/26	14	3.9	6.7	4.5
Chama Divide	2/26	16	5.3	4.6	3.0
Chamita	2/26	33	9.2	9.5	7.3
Rio Grande					
Alamitos	2/23	22	6.8	8.5	---
Big Tesuque	2/26	17	5.2	7.3	4.9
Cordova	2/24	37	11.1	10.6	9.6
Elk Cabin	2/26	8	2.8	5.8	3.1
Hopewell	2/25	52	15.2	16.2	---
La Cueva	2/25	13	3.0	7.0	---
Pajarito	2/25	0	0.0	1.8	0.5
Pajarito Peak	2/25	0	0.0	4.4	1.2
Palo	2/25	29	9.2	8.4	---
Payrole	2/27	29	7.6	11.2	7.8
Quemazon	2/27	21	4.9	11.0	7.8
Rio En Medio	2/26	27	7.4	9.9	8.0
Sandoval	2/27	10	2.7	7.2	4.5
Senorita Divide	2/25	18	5.0	9.5	---
Taos Canyon	2/25	22	7.7	7.3	3.8
Tres Ritos	2/23	25	7.4	6.4	4.6
Rio Hondo					
Taos Powderhorn	2/27	65	22.9	22.3	---
Red River					
Hematite Park (B)	2/26	21	6.4	5.3	3.5
Red River	2/26	22	7.5	7.2	5.0
Red River #2	2/25	27	9.0	7.9	---

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1976

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SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	2/25	52	15.3	12.9	10.0
Lemon #2	2/27	44	12.5	14.1	---
Mineral Creek	2/25	50	15.9	17.1	12.9
Molas Lake	2/25	43	12.8	13.1	11.2
Purgatory	2/25	66	19.1	20.6	---
Red Mt. Pass (B)	2/25	84	25.8	29.5	25.4
Silverton Sub-Sta.	2/25	35	10.2	10.4	6.7
Spud Mountain	2/25	71	22.9	24.5	19.7
Dolores River					
Lizard Head	2/25	52	14.1	17.5	13.9
Lone Cone	2/26	56	17.1	15.8	---
Ophir Loop	2/25	42	10.1	---	---
Rico	2/25	30	6.7	8.9	7.2
Telluride	2/25	35	9.0	9.5	6.7
Trout Lake	2/25	46	12.3	15.5	11.8
San Juan River					
Chama Divide (B)	2/26	16	5.3	4.6	3.0
Chamita (B)	2/26	33	9.2	9.5	7.3
Upper San Juan	2/26	90	29.8	29.2	24.5
Wolf Cr. Pass (B)	2/26	86	26.6	22.3	22.0
Wolf Cr. Summit	2/26	86	25.0	27.5	22.5
GUNNISON BASIN					
Gunnison River					
Alexander Lake	2/27	55	17.6	18.5	17.4
Blue Mesa	2/27	32	7.8	9.4	6.9
Butte	2/26	43	12.0	13.0	---
Cochetopa Pass (B)	2/24	22	4.9	7.5	4.8
Crested Butte	2/26	50	13.8	12.9	10.3
Keystone	2/26	54	15.9	19.0	16.7
Lake City	2/25	26	6.1	7.9	7.0
Mesa Lakes (B)	2/26	47	12.4	14.3	13.5
McClure Pass	3/01	50	15.1	15.2	14.7
Park Cone	2/24	40	9.6	8.5	8.8
Park Reservoir	2/25	73	21.7	18.3	19.5
Porphyry Creek	2/25	44	11.0	17.8	13.7
Tomichi	2/25	33	8.2	13.9	10.5
Surface Creek					
Alexander Lake	2/27	55	17.6	18.5	17.4
Mesa Lakes	2/26	47	12.4	14.3	13.5
Park Reservoir	2/25	73	21.7	18.3	19.5
Uncompahgre River					
Ironton Park	2/27	43	13.0	17.9	11.3
Red Mountain Pass	2/25	84	25.8	29.5	25.4
Telluride (B)	2/25	35	9.0	9.5	6.7
COLORADO BASIN					
Blue River					
Blue River	3/01	28	7.5	8.6	7.4
Fremont Pass	2/26	49	14.4	13.4	12.9
Frisco Pass	2/26	24	6.9	8.0	6.4
Grizzly Peak	2/26	44	12.7	15.1	14.6
Hoosier Pass (B)	3/01	37	10.2	12.9	10.6
Shrine Pass	2/26	48	12.9	15.3	14.5
Snake River	2/26	26	6.3	6.1	7.0
Summit Ranch	2/27	22	5.2	6.4	7.0

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Colorado River					
Arrow	2/26	36	10.4	10.8	10.5
Berthoud Pass	2/27	37	10.8	14.1	12.8
Berthoud Summit	2/26	44	13.1	16.8	15.4
Cooper Hill				9.7	9.0
Fiddler Gulch	NS	--	---	---	---
Glenmar Ranch	2/26	26	6.9	8.4	7.0
Gore Pass	2/27	32	9.3	10.8	8.6
Grand Lake	2/27	32	7.1	8.3	7.0
Lake Irene	2/27	54	17.2	17.3	19.0
Lapland	2/25	28	7.3	9.3	9.0
Lulu	2/25	54	15.2	17.1	14.9
Lynx Pass	2/27	36	10.5	12.6	10.5
McKenzie Gulch	2/27	26	5.8	5.4	5.5
Middle Fork	2/26	28	6.7	8.5	8.1
Milner	2/27	37	10.4	11.4	---
North Inlet	2/28	26	6.6	7.3	7.6
Pando	2/26	31	7.4	8.3	8.2
Phantom Valley	2/27	31	8.1	10.7	9.3
Ranch Creek	2/26	26	7.1	7.7	7.8
Tennessee Pass (B)	2/27	36	8.7	9.6	8.7
Vail Pass	NS	--	---	13.2	14.5
Vasquez	2/25	36	9.6	10.0	10.2
Roaring Fork					
Aspen	2/25	54	16.0	14.7	14.0
Independence Pass	2/25	49	13.8	14.5	13.9
Ivanhoe	2/25	52	14.3	15.6	13.9
Kiln	2/25	43	10.5	11.5	---
Lift	2/25	43	14.5	13.3	13.6
McClure Pass	3/01	50	15.1	15.2	14.7
Nast	2/25	27	6.4	7.2	5.5
North Lost Trail	3/01	48	13.3	14.2	13.3
Williams Fork River					
Glenmar Ranch	2/26	26	6.9	8.4	7.0
Jones Pass	2/27	41	10.9	13.4	11.9
Middle Fork	2/26	28	6.7	8.5	8.1
Willow Creek					
Granby	2/26	26	7.1	6.9	6.5
Willow Cr. Pass	2/26	38	10.3	10.2	10.4
Plateau Creek					
Mesa Lakes	2/26	47	12.4	14.3	13.5
Park Reservoir	2/25	73	21.7	18.3	19.5
Trickle Divide	2/25	75	22.9	20.4	21.0
YAMPA BASIN					
Elk River					
Elk River #2	2/26	50	14.7	15.4	15.9
Hahn's Peak	2/26	44	12.8	13.6	---
White River					
Burro Mountain	2/26	48	13.8	18.6	15.0
Rio Blanco	2/25	39	10.8	14.7	13.1
Yampa River					
Bear River	2/24	38	8.8	10.6	---
Columbine (B)	2/26	58	17.8	24.2	20.4
Crosho	NS	--	---	---	---
Dry Lake	2/25	47	12.8	18.9	17.8
Lynx Pass (B)	2/27	36	10.5	12.6	10.5
Rabbit Ears	2/26	55	16.8	24.5	21.8
Tower	2/25	101	33.6	43.8	---
Yampa View	2/26	38	11.2	16.1	13.0

NOTE: NS - No Survey
(B) - On Adjacent Drainage

GPO 833-966

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

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Colorado Public Service Company
Public Service Company of New Mexico

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Arkansas Valley Ditch Association
Colorado River Water Conservation District

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Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
APR. 1, 1976

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its accurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide o continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SURVEYOR ENROUTE TO THE MT. BALDY ARIZONA SNOW COURSE
SCS PHOTO AZ-S460

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
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Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OREG 1979

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

M. D. BURDICK

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

ALBERT W. HAMELSTROM

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN

DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
BERNARD A. SHAFER, Assistant Snow Survey Supervisor
JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1976

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
APRIL 1, 1976

FORECASTS OF WATER SUPPLIES ARE RELATIVELY UNCHANGED FROM LAST MONTH EXCEPT FOR NEW MEXICO WHERE FORECASTS WERE LOWERED. MOST OF COLORADO IS EXPECTED TO HAVE STREAMFLOW NEAR AVERAGE WITH TWO EXCEPTIONS. IN THE FRONT RANGE FROM CLEAR CREEK DRAINAGE IN THE SOUTH TO THE BIG THOMPSON DRAINAGE IN THE NORTH LIMITED WATER SHORTAGES ARE EXPECTED. STREAMS WITH HEADWATERS IN THE SAN JUAN MOUNTAINS SHOULD FLOW TEN TO TWENTY PERCENT ABOUT NORMAL. NEAR AVERAGE ACCUMULATIONS OF SNOW WERE RECEIVED DURING THE MONTH OF MARCH. THE MOUNTAIN SNOWPACK IS NOW VERY NEAR ITS MAXIMUM FOR THE SEASON.

COLORADO -- PROJECTED STREAMFLOW IS EXPECTED TO BE NEAR AVERAGE OVER MOST OF THE STATE. SNOWFALL IN THE MOUNTAINS DURING MARCH WAS NEAR NORMAL. A LOW SNOWPACK STILL EXISTS IN THE FRONT RANGE ON THE HEADWATERS OF CLEAR CREEK, ST. VRAIN, BOULDER, AND BIG THOMPSON DRAINAGES. SPRING AND SUMMER MELT-WATER FROM THE SAN JUAN MOUNTAINS SHOULD PRODUCE STREAMFLOW TEN TO TWENTY PERCENT ABOVE NORMAL BARRING ANY LARGE DEPARTURES FROM THE NORMAL SPRING PRECIPITATION PATTERN. RESERVOIR STORAGE IS AVERAGE FOR THIS TIME OF YEAR. SOIL MOISTURE IS FAIR TO POOR IN MOST IRRIGATED AREAS.

NEW MEXICO -- STREAMFLOW FORECASTS ON STREAMS ORIGINATING IN NEW MEXICO HAVE DROPPED FROM LAST MONTH AS A RESULT OF SLIGHTLY BELOW AVERAGE SNOWFALL DURING MARCH. STREAMFLOW SHOULD RANGE FROM TWENTY-FIVE PERCENT BELOW NORMAL ON THE JEMEZ AND SANTA CRUZ DRAINAGES TO FIFTEEN PERCENT ABOVE ON THE RIO GRANDE. THE HIGHER FLOWS ON THE RIO GRANDE REFLECT THE GOOD SNOWPACK IN THE SAN JUAN MOUNTAINS OF COLORADO. SOIL MOISTURE IN VALLEY AREAS REMAINS POOR IN MOST AREAS. RESERVOIR STORAGE IS HIGHLY VARIABLE.

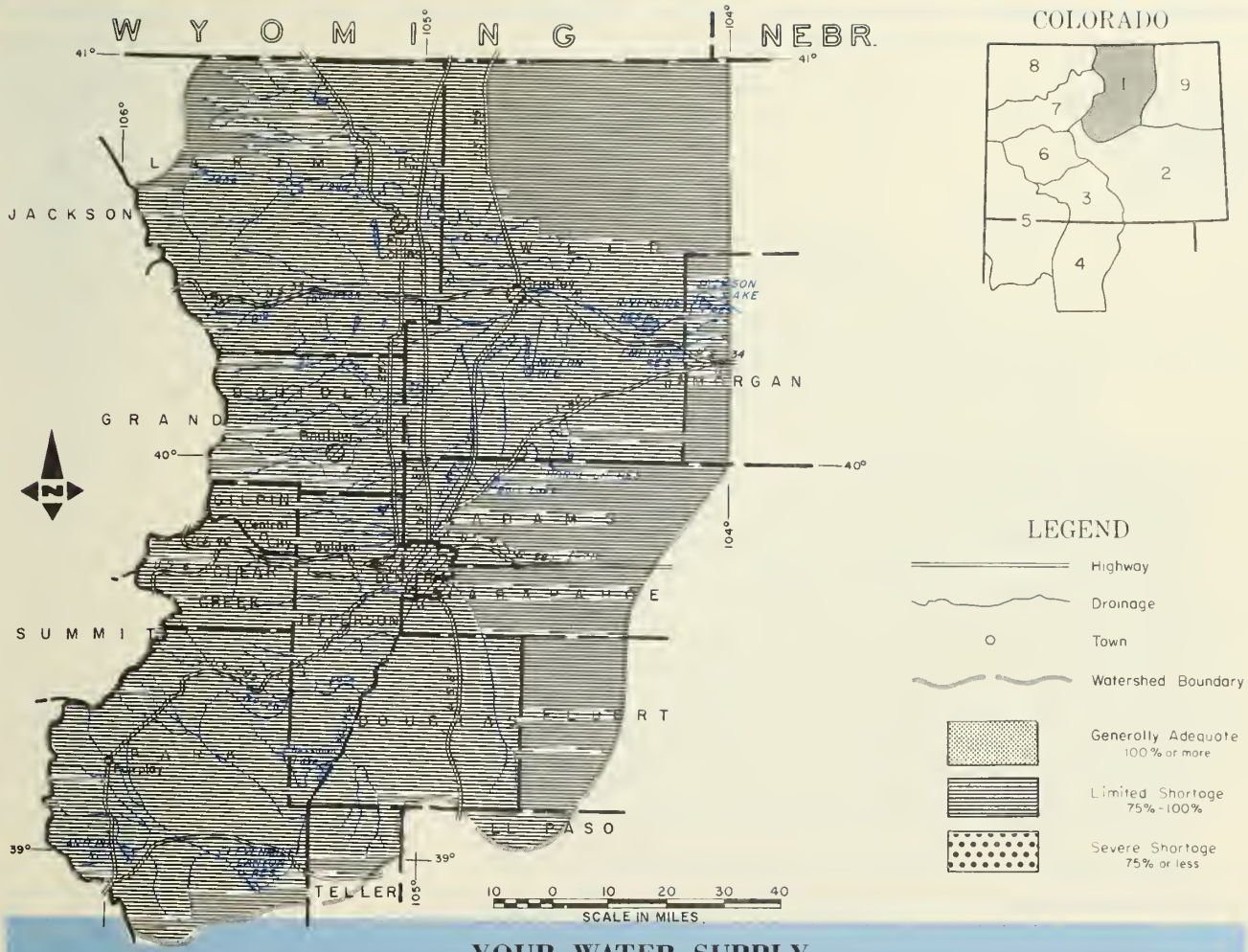
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO


WYOMING
NEBR.
COLORADO
JACKSON
GRAND
SUMMIT
MORGAN
ADAMS
ARAPAHOE
DOUGLAS
ELBERT
EL PASO
TELLER
GILPIN
CLEAR CREEK
JEFFERSON
Fort Collins
Greeley
Boulder
Golden
Central City
Denver
Parker
Castle Rock
Monument
Colorado Springs
Pueblo
Cripple Creek
Woodland Park
Cripple Creek
Walden
Kremmling
Hot Sulphur Springs
Granby
Grand Lake
Estes Park
Nederland
Ward
Jamestown
Lyons
Longmont
Brighton
Fort Lupton
Hudson
Bennett
Strasburg
Deer Trail
Limon
Hugo
Kiowa
Elizabeth
Calhan
Ramah
Simla
Yoder
Peyton
Falcon
Ellicott
Calhan
Fountain
Manitou Springs
Cripple Creek
Woodland Park
Florissant
Divide
Cripple Creek
Victor
Lake George
Hartsel
Fairplay
Alma
Leadville
Minturn
Red Cliff
Eagle
Gypsum
Dotsero
Kremmling
Parshall
Tabernash
Fraser
Winter Park

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Big Thompson River at Drake (1)	92	86	107
Boulder Creek at Orodell	36	73	49
Cache La Poudre River at Canyon Mouth (2)	210	85	247
Clear Creek at Golden (3)	92	72	127
St. Vrain Creek at Lyons (4)	60	80	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Avg.	Fair
Coal Creek	Fair	Fair
North Fork of South Platte	Fair	Fair
North Fork of Cache La Poudre	Avg.	Fair
Ralston Creek	Fair	Fair
Rock Creek	Fair	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Big Thompson	5	86	91
Boulder	3	78	82
Cache La Poudre	7	99	104
Clear Creek	6	69	81
Saint Vrain	3	75	82
South Platte	3	70	95

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Antero	33	16	16	14
Barr Lake	32	27	29	25
Black Hollow	8	5	5	4
Boyd Lake	44	38	37	38
Cache La Poudre	10	7	7	8
Carter Lake	109	102	107	95
Chambers Lake	9	3	4	3
Cheesman	79	47	44	59
Cobb Lake	34	16	17	15
Eleven Mile	98	97	97	88
Fossil Creek	12	7	8	8
Gross	43	19	19	28
Halligan	6	2	6	5
Horsetooth	144	121	103	111
Lake Loveland	14	10	10	10
Lone Tree	9	5	6	7
Mariano	5	5	5	5
Marshall	10	5	7	5
Marston	18	14	16	15
Milton	24	16	15	14
Standley	42	33	32	19
Terry	8	6	6	5
Union	13	11	12	10
Windsor	19	15	12	12

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

STREAMFLOW IS FORECAST TO BE NEAR TO SLIGHTLY BELOW AVERAGE ON ALL STREAMS. SNOWFALL DURING MARCH WAS NEAR NORMAL. THE MOUNTAIN SNOWPACK IS NEAR MAXIMUM FOR THE SEASON AND WILL SOON BEGIN TO RELEASE ITS STORED WATER. SOIL MOISTURE IN IRRIGATED AREAS REMAINS POOR. CARRYOVER STORAGE IS MUCH BELOW NORMAL IN NEARLY ALL RESERVOIRS.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A. MOSS – AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

D. W. GILLASPIE – AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Arkansas River near Pueblo (1)	300	103	290
Arkansas River at Salida (1)	320	102	313
Cucharas River near La Veta	10	100	10
Huerfano River near Redwing	14	93	15
Purgatoire River at Trinidad	34	89	38

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Apishapa River	Avg.	Avg.
Fountain Creek	Avg.	Avg.
Grape Creek	Avg.	Avg.
Hardscrabble Creek	Avg.	Avg.
Monument Creek	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Arkansas	10	69	97
Cucharas	1	57	104
Purgatoire	1	58	94

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Adobe	62	0	0	17
Clear Creek	11	4	2	8
Cucharas	40	NA	0	3
Great Plains	150	0	0	61
Horse Creek	27	8	0	7
John Martin	354	10	8	91
Meredith	42	0	0	14
Model	15	0	0	4
Turquoise	121	45	38	--
Twin Lakes	58	17	16	26

NA-Not Available

* 1958-1972 period.

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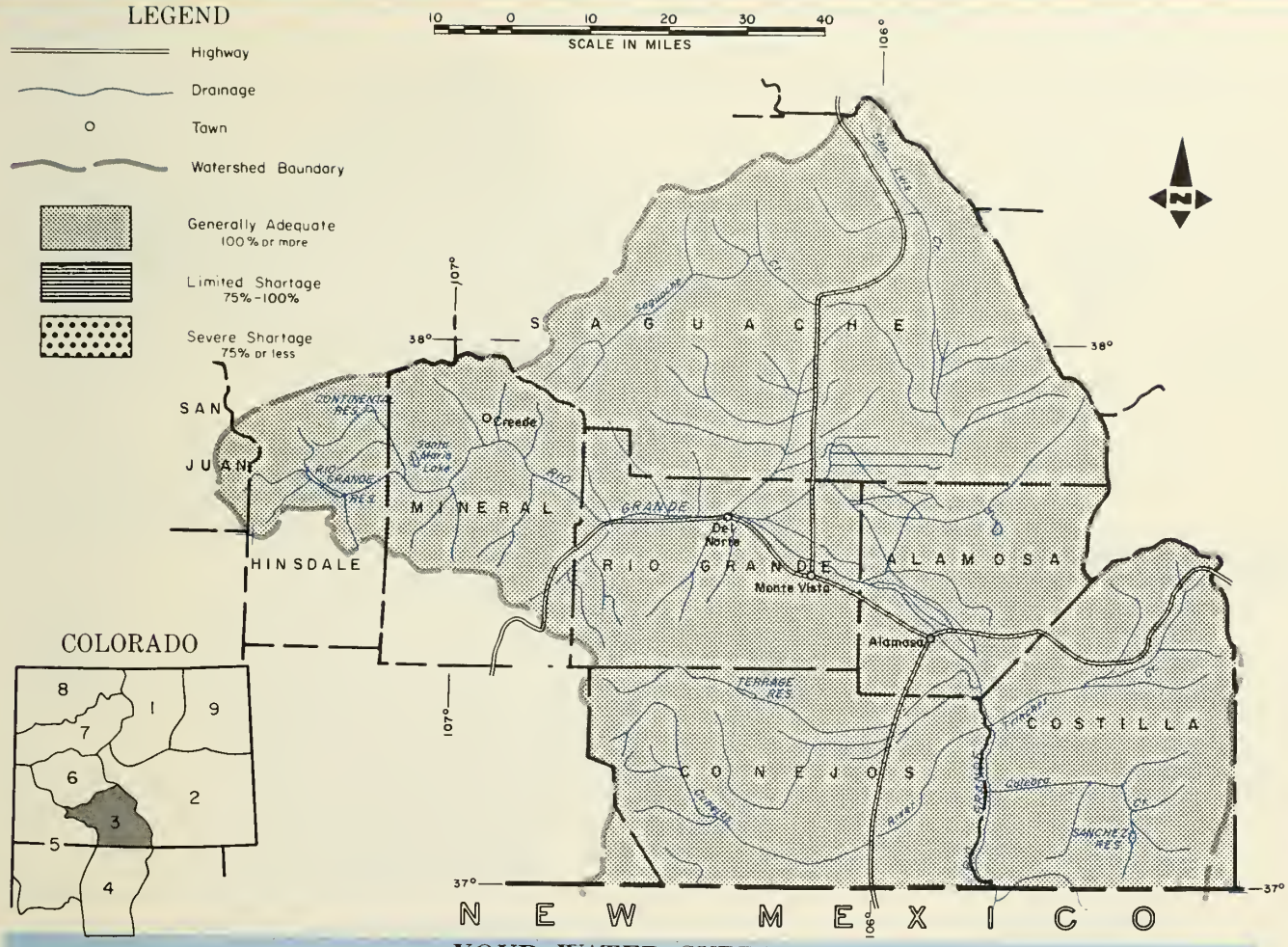
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

APRIL 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWFALL REMAINED ABOVE NORMAL DURING MARCH. FORECASTS ON THE RIO GRANDE STREAMS ARE ABOVE NORMAL EXCEPT ON THE EASTERN SIDE OF THE BASIN WHERE CULEBRA CREEK IS ONLY EXPECTED TO FLOW 90%. THIS SHOULD PROVIDE ADEQUATE WATER FOR ALL USERS. CARRYOVER STORAGE IS 124% OF NORMAL AND WILL PROVIDE A GOOD SUPPLEMENT. MORE SNOW COULD ACCUMULATE AT THE HIGHER LEVELS DURING APRIL.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER COLORADO

D. W. GILLASPIE - AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	* Average
Alamosa Creek above Terrace Reservoir	72	116	62
Conejos River near Mogote (1)	200	109	184
Culebra Creek at San Luis (2)	15	88	17
Rio Grande at 30 Mile Bridge (3)	130	107	121
Rio Grande near Del Norte (3)	525	112	468
South Fork of Rio Grande at South Fork	135	117	115

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Avg.	Avg.
Sangre de Cristo Cr.	Avg.	Avg.
Trinchera Creek	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Alamosa	2	83	126
Conejos	3	76	110
Culebra	2	59	79
Rio Grande	10	76	121

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Continental	27	5	3	6
Platoro	60	14	19	9
Rio Grande	46	18	9	18
Sanchez	103	NA	7	14
Santa Maria	45	10	4	7
Terrace	18	10	5	6

NA-Not Available

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

APRIL 1, 1976

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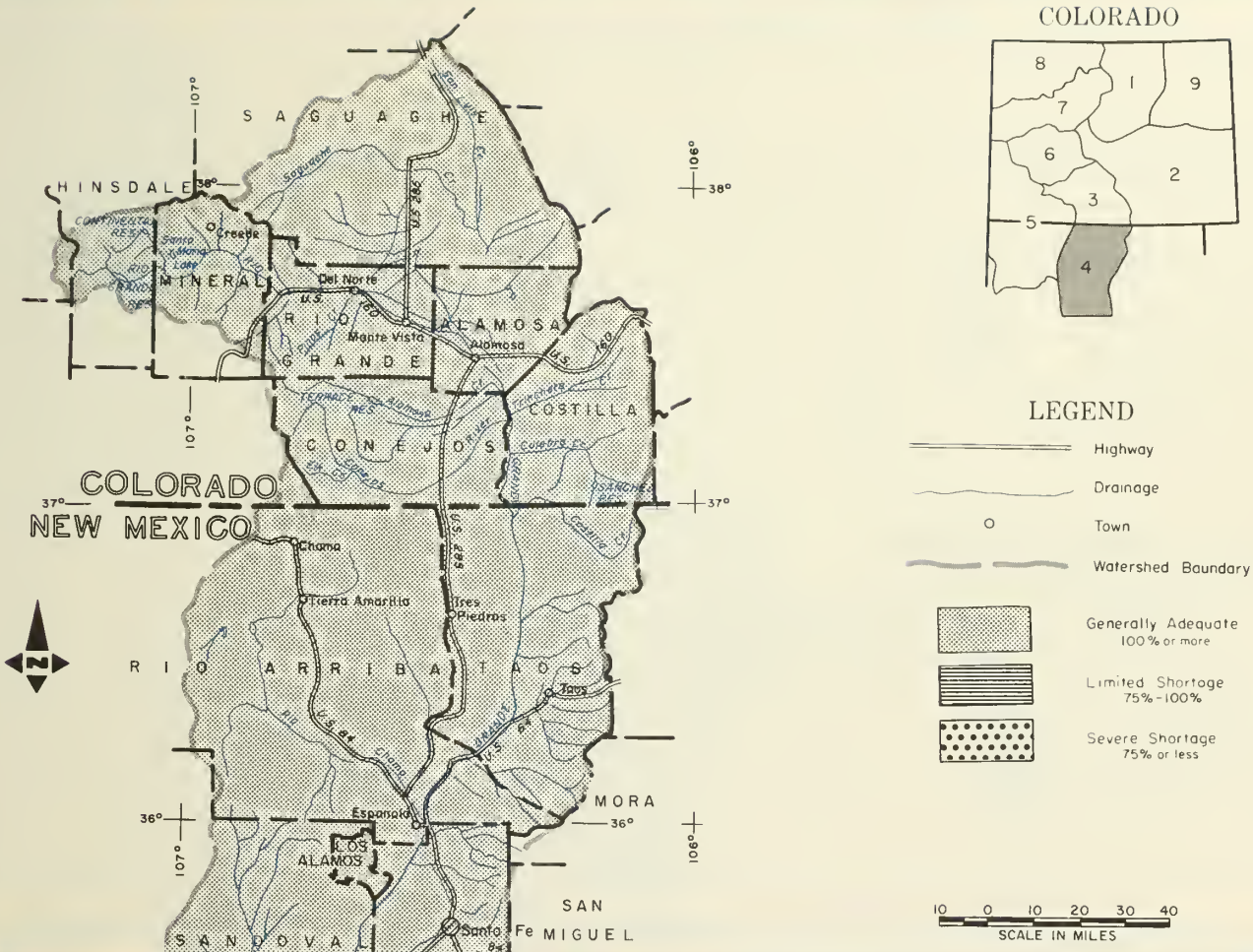

YOUR WATER SUPPLY

THE SNOWPACK IN NEW MEXICO IS GENERALLY BELOW NORMAL. FLOWS WILL BE DEFICIENT ON SOME OF THE SMALL STREAMS. STREAMS ORIGINATING IN COLORADO ARE EXPECTED TO FLOW BETTER THAN NORMAL DUE TO THE GOOD SNOWPACK. CARRYOVER STORAGE IS GOOD. THE SNOW SEASON IS CONSIDERED TO BE OVER IN NEW MEXICO HOWEVER SOME HIGH ELEVATION ACCUMULATION COULD OCCUR.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

A. W. HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE NEW MEXICO

JAMES E. TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

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STREAMFLOW FORECASTS (1000 Ac. Ft.) March—July

FORECAST POINT	FORE-CAST	% of Average	Average *
Costilla Creek at Costilla (1)	15	80	19
Jemez River near Jemez	22	76	29
Pecos River at Pecos	35	85	41
Red River at Mouth near Questa	25	86	29
Rio Chama at El Vado	200	105	190
Rio Grande at Otowi (2)	600	114	526
Rio Grande at San Marcial (2)	425	120	355
Rio Hondo near Valdez	12	86	14
Santa Cruz River at Cundiyo	10	77	13

(1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo Creek	Fair	Fair
Mora River	Fair	Fair
Nambe Creek	Fair	Fair
Rio Ojo Caliante	Fair	Fair
Rio Pueblo de Taos	Fair	Fair
Santa Fe Creek	Fair	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Pecos	1	7	15
Red River	2	86	144
Rio Chama	5	39	79
Rio Grande, NM	11	47	80
Rio Hondo	–	–	–

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Alamogordo	111	2	48	63
Avalon	5	5	1	--
Caballo	344	44	42	65
Conchas	273	83	132	184
El Vado	195	130	95	6
Elephant Butte	2195	651	445	394
McMillan	34	16	29	--

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
APRIL 1, 1976

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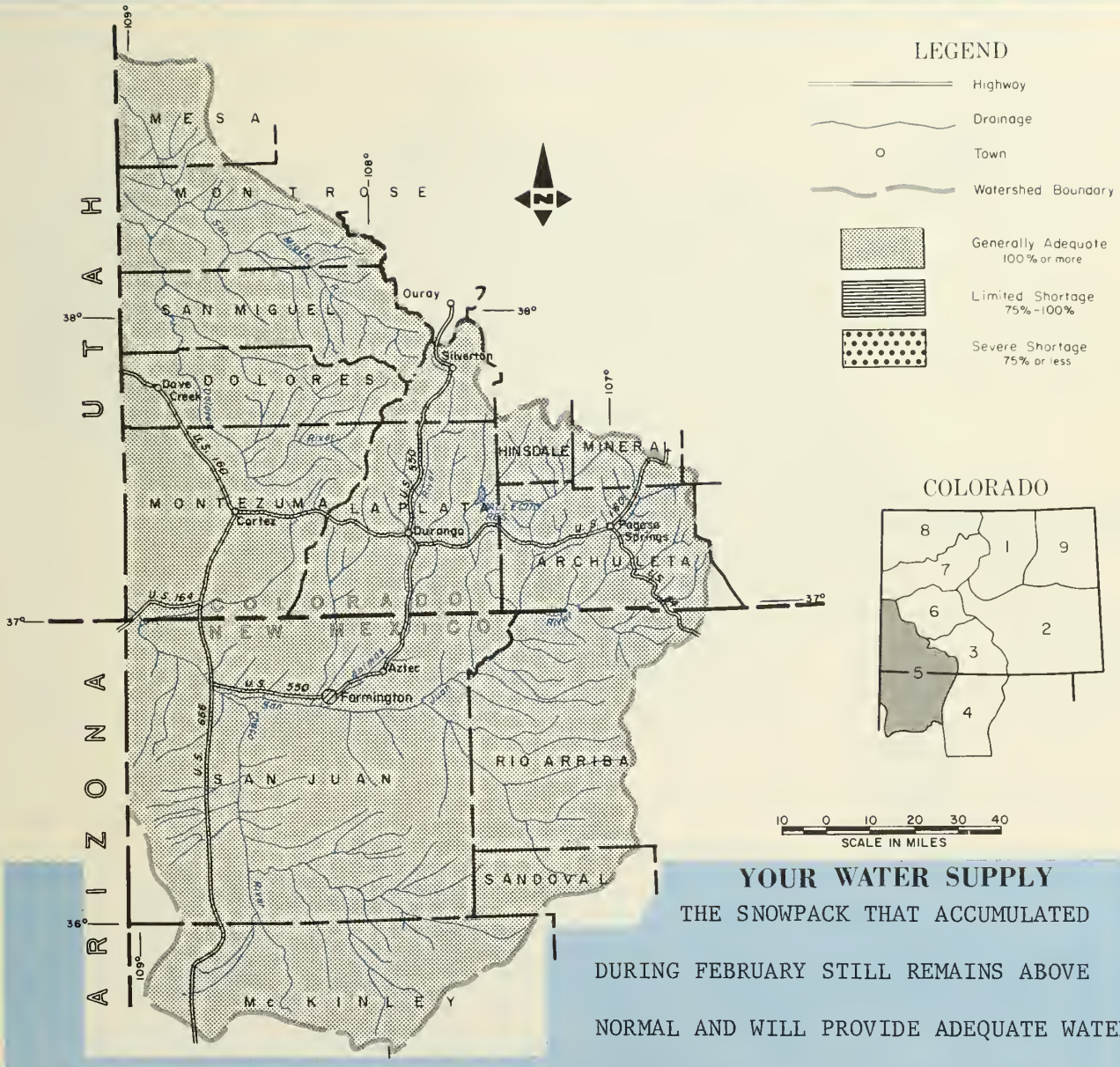

YOUR WATER SUPPLY

THE SNOWPACK THAT ACCUMULATED DURING FEBRUARY STILL REMAINS ABOVE NORMAL AND WILL PROVIDE ADEQUATE WATER SUPPLIES THIS SUMMER. ALL FORECASTS IN THE BASIN ARE HIGHER THAN THE 1958-72 NORMAL. CARRYOVER STORAGE IS 118% OF NORMAL AND SHOULD BE A GOOD SUPPLEMENTAL SUPPLY. VALLEY SOIL MOISTURE IS REPORTED AS FAIR TO GOOD.

This report prepared by

JACK N WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK—STATE CONSERVATIONIST
DENVER, COLORADO

A W HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D W GILLASPIE—AREA CONSERVATIONIST
ALAMOSA COLORADO

JAMES E TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Animas River at Durango	450	111	423
Dolores River at Dolores	255	116	232
La Plata River at Hesperus	24	121	24
Los Pinos River at Bayfield (1)	210	114	198
Mancos River near Towac	16	114	14
Inflow to Navajo River (1 & 2)	680	120	597
Piedra Creek at Arboles	215	119	185
San Juan River at Carracas	400	113	354
San Miguel River at Placerville	140	108	130

(1) Observed flow plus change in storage in Vallicito Reservoir. (2) April – July

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida River	Exc.	Avg.
Hermosa Creek	Exc.	Avg.
West Dolores River	Exc.	Avg.
Williams Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Animas	6	74	117
Dolores	4	61	104
San Juan	5	73	118

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Groundhog	22	9	8	10
Jackson Gulch	10	6	3	5
Lemon	40	20	5	20
Navajo	1696	1063	974	887
Vallecito	126	60	30	57

* 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO
as of
APRIL 1, 1976

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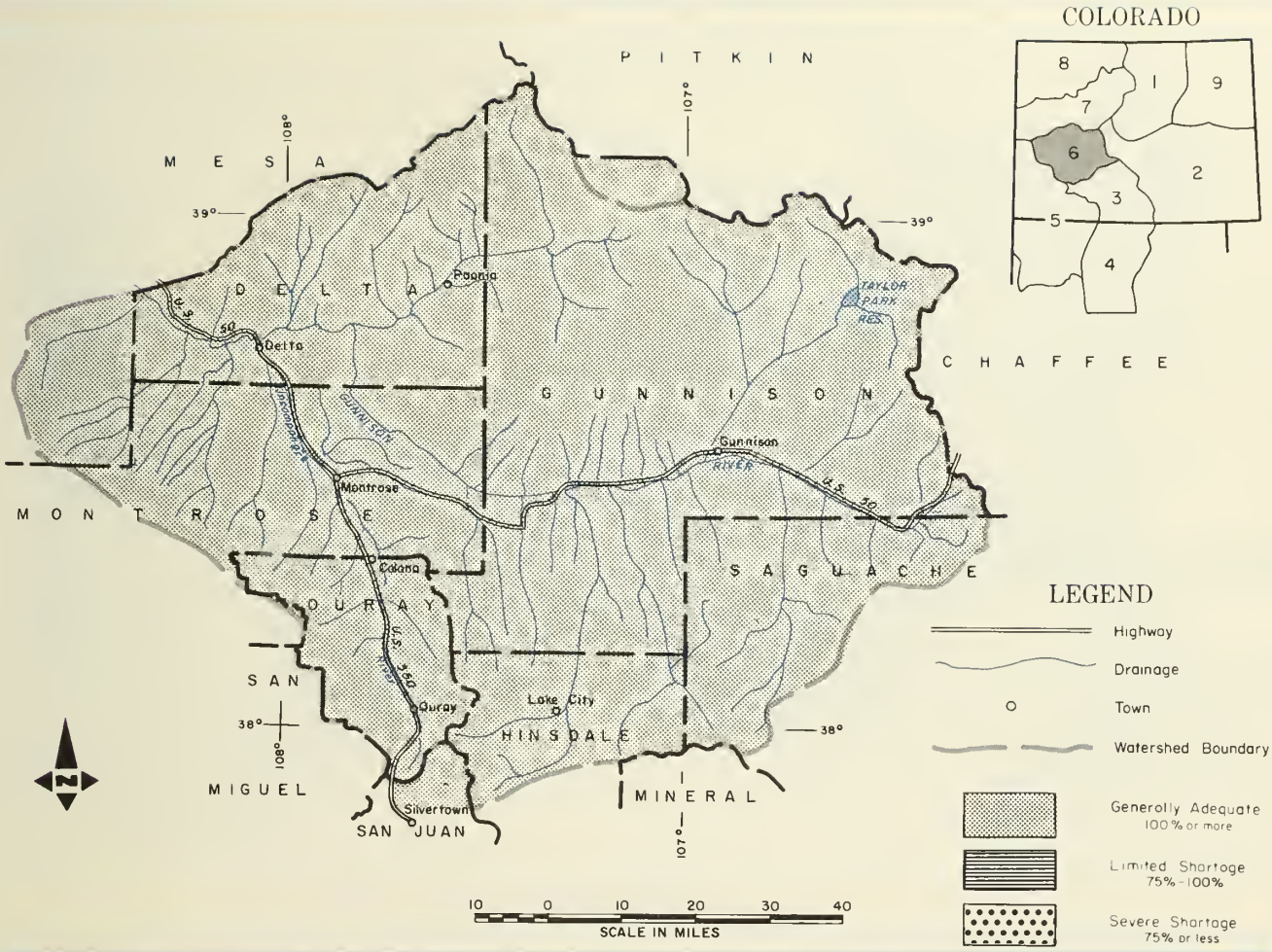

YOUR WATER SUPPLY

SUMMER FLOW OF THE GUNNISON RIVER AND ITS TRIBUTARIES SHOULD BE ABOVE NORMAL. THIS SHOULD PROVIDE ADEQUATE WATER TO ALL USERS. CARRYOVER STORAGE IS 120% OF NORMAL. BLUE MESA NOW CONTAINS 425,000 ACRE FEET. SOILS IN THE IRRIGATED AREA ARE REPORTED TO BE IN FAIR CONDITION.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK—STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Gunnison River inflow to Blue Mesa Reservoir (1)	840	106	793
Gunnison River near Grand Junction (2)	1250	106	1184
North Fork of Gunnison (3)	280	106	263
Surface Creek near Cedaredge	15	94	16
Uncompahgre River at Colona	140	104	134

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ohio Creek	Avg.	Fair
Slate River	Avg.	Fair
Taylor River	Avg.	Fair
Tomichi Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Gunnison	12	72	95
Surface Creek	3	74	92
Uncompahgre	3	70	114

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Blue Mesa	830	425	336	315
Morrow Point	121	115	115	114
Taylor	106	60	50	65

* 1958-1972 period

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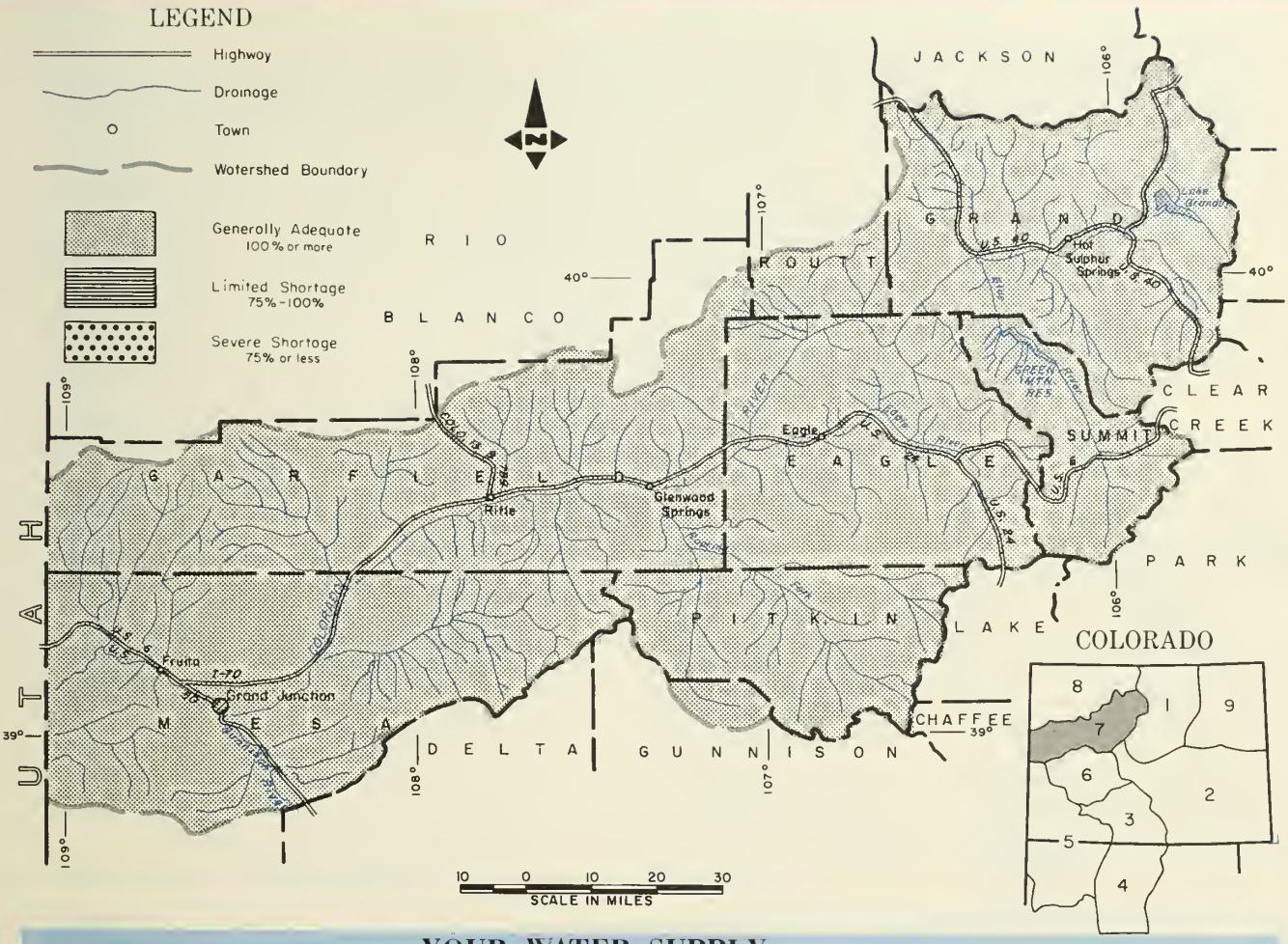
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

APRIL 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE COLORADO RIVER SNOWPACK REMAINED ABOUT NORMAL DURING MARCH. NEAR NORMAL STREAMFLOWS SHOULD RESULT. FORECASTS ARE MADE ASSUMING NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR. AT LEAST A MONTH OF POSSIBLE SNOW BUILD-UP REMAINS. CARRYOVER STORAGE IS SLIGHTLY ABOVE NORMAL.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BUROICK – STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON – AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Blue River inflow to Dillon Reservoir	135	80	169
Blue River inflow to Green Mountain Reservoir (1)	280	94	297
Colorado River near Cameo (6)	2350	99	2370
Colorado River near Dotsero (3)	1400	98	1434
Colorado River inflow to Granby Reservoir (2)	220	96	228
Roaring Fork at Glenwood Springs (4)	715	100	713
Williams Fork near Parshall (5)	55	87	63
Willow Creek inflow to Willow Creek Reservoir	47	100	47

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Avg.	Avg.
Eagle River	Avg.	Avg.
Gypsum Creek	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Blue River	8	76	92
Colorado	20	84	94
Plateau	3	76	93
Roaring Fork	7	76	103
Williams Fork	3	83	93
Willow	2	88	97

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Dillon	254	225	209	231
Granby	466	279	288	213
Green Mountain	139	58	62	54
Homestake	43	0	33	15
Ruedi	101	55	54	59
Vega	32	12	6	12
Williams Fork	97	42	34	25
Willow Creek	9	6	7	6

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
APRIL 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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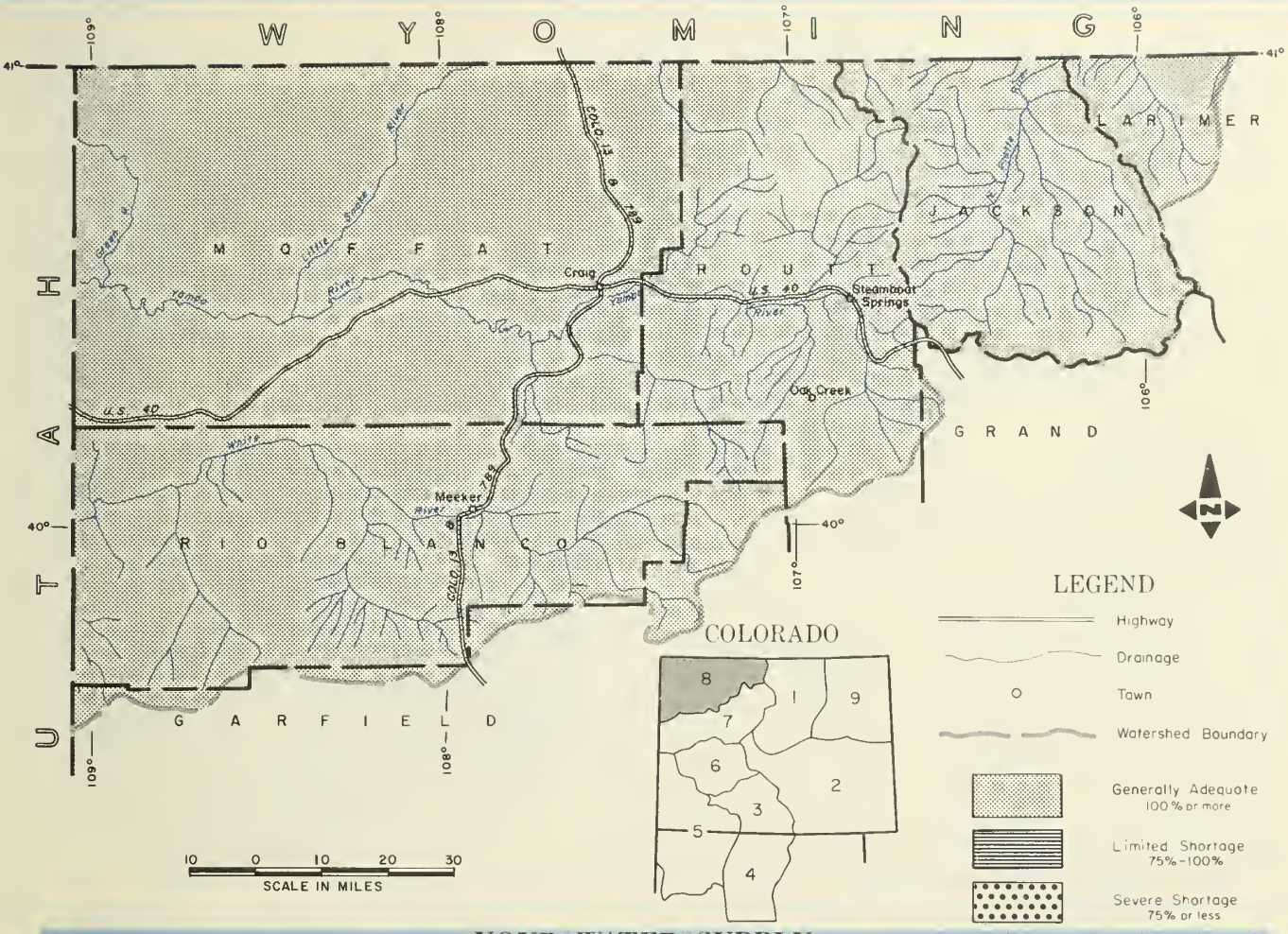

YOUR WATER SUPPLY

THE SNOWPACK IN NORTH CENTRAL AND NORTHWESTERN COLORADO IS JUST SLIGHTLY BELOW NORMAL. SUMMER FLOWS SHOULD STILL PROVIDE ADEQUATE WATER TO MOST USERS. EARLY SEASON FLOW SHOULD BE AT LEAST AVERAGE. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS FAIR. FORECASTS ARE BASED ON NORMAL CLIMATIC CONDITIONS FOR THE REMAINDER OF THE YEAR. AT LEAST ONE MORE MONTH REMAINS WHEN SNOW COULD ACCUMULATE AT HIGH ELEVATIONS.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L. JOHNSON - AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Elk River at Clark	180	91	198
Laramie River near Woods	127	100	127
Little Snake River at Lily	300	93	324
North Platte River at Northgate	216	90	240
White River near Meeker	285	97	295
Yampa River near Maybell	790	87	905
Yampa River at Steamboat Springs	230	84	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Avg.	Avg.
Hunt Creek	Avg.	Avg.
Illinois River	Avg.	Avg.
Michigan River	Avg.	Avg.
Oak Creek	Avg.	Avg.
Trout Creek	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Elk	2	72	89
Laramie	3	112	105
North Platte	5	89	101
White	2	82	100
Yampa	6	72	87

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
APRIL 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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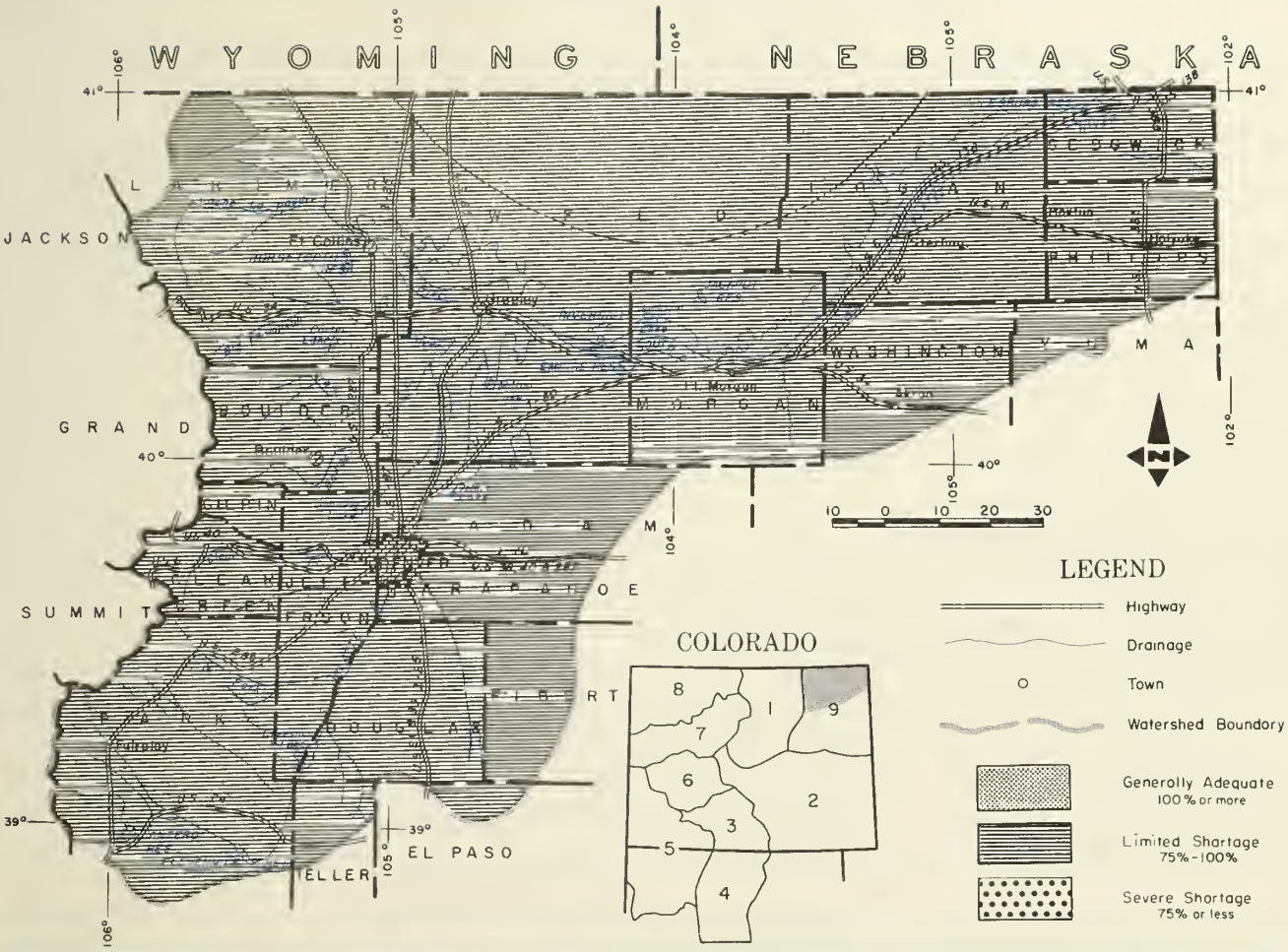

YOUR WATER SUPPLY

SNOWFALL WAS LIGHT DURING MARCH OVER ALL OF THE SOUTH PLATTE BASIN. FORECASTS WERE DROPPED BELOW NORMAL ON THE MAINSTEM AND ALL THE NORTHERN TRIBUTARIES. EXPECTED STREAMFLOW RANGES BETWEEN 70% AND 97% OF THE 15-YEAR NORMAL. EARLY FLOWS SHOULD BE ABOUT NORMAL, BUT LATE SEASON FLOWS WILL BE LOW, EXPECIALLY BELOW GREELEY. CARRYOVER RESERVOIR STORAGE IS NORMAL.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK, STATE CONSERVATIONIST
DENVER, COLORADO

ROONEY M. ALT, AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	92	86	107
Boulder Creek at Orodell	36	73	49
Cache La Poudre River at Canyon Mouth (2)	240	97	247
Clear Creek at Golden (3)	89	70	127
Saint Vrain Creek at Lyons (4)	60	80	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Fair	Poor
South Platte from Fort Morgan to Sterling	Fair	Poor
South Platte below Sterling	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average*
Big Thompson	5	86	91
Boulder	3	78	82
Cache La Poudre	7	99	104
Clear Creek	6	69	81
Saint Vrain	3	75	82
South Platte	3	70	95

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average*
Carter	109	102	107	95
Cheesman	79	47	44	59
Eleven Mile	98	97	97	88
Empire	38	32	32	33
Horsetooth	144	121	103	111
Jackson	35	32	32	34
Julesburg	28	23	23	22
Point of Rocks	70	69	71	66
Prewitt	33	27	27	23
Riverside	58	58	52	58

* 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of APRIL 1, 1976

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	3/31	49	15.3	14.2	16.8
McIntyre	3/28	40	11.3	11.1	10.8
Roach	3/28	67	21.5	17.8	18.2
North Platte River					
Cameron Pass	3/29	84	33.8	31.9	28.7
Columbine Lodge	3/25	58	20.3	29.5	24.0
Northgate	3/29	22	5.6	5.8	6.5
Park View	3/30	34	9.7	10.7	9.2
Willow Cr. Pass (B)	3/30	41	12.2	14.0	12.7
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	3/29	21	5.6	7.7	6.8
Boulder Falls	3/29	46	11.8	14.0	13.4
University Camp	3/29	58	15.0	20.0	19.3
Big Thompson River					
Deer Ridge	3/29	20	4.6	5.2	4.8
Hidden Valley	3/30	38	10.9	10.1	10.5
Lake Irene (B)	3/28	59	19.5	21.6	20.9
Long's Peak	3/29	39	8.9	13.5	10.9
Two Mile	3/30	46	12.8	15.3	15.1
Cache La Poudre					
Bennett Creek	3/30	28	6.7	6.4	---
Big South	3/29	3	0.6	2.6	2.1
Cameron Pass	3/29	84	33.8	31.9	28.7
Chambers Lake	3/29	29	9.9	12.1	9.6
Deadman Hill	3/31	49	15.3	14.2	16.8
Hourglass Lake	3/30	27	7.6	6.6	6.7
Joe Wright	3/29	72	23.4	26.6	---
Lost Lake	3/29	40	11.9	12.9	11.8
Red Feather	3/31	24	7.0	6.3	6.9
Clear Creek					
Baltimore (B)	3/29	21	5.6	7.7	6.8
Berthoud Falls	3/29	38	10.4	17.4	13.6
Empire	3/29	25	6.4	10.4	7.8
Grizzly Peak (B)	3/26	51	15.3	22.3	18.9
Loveland Lift	3/26	50	15.1	20.8	21.1
Loveland Pass	3/26	45	15.1	19.6	15.7
St. Vrain River					
Copeland Lake	3/29	16	3.3	6.3	4.4
Ward	3/30	27	5.1	5.9	6.5
Wild Basin	3/29	37	9.8	12.2	11.2
South Platte River					
Como	3/30	27	6.6	8.9	---
Geneva Park	3/27	16	3.6	5.0	3.8
Horseshoe Mt.	3/29	38	9.6	16.2	---
Hoosier Pass	3/31	42	11.7	17.5	12.9
Jefferson Creek	3/30	35	9.4	12.9	9.2
Mosquito	3/30	31	8.4	14.2	---
Trout Creek Pass	3/29	22	4.7	6.7	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	3/29	33	8.2	9.5	6.5
Cooper Hill (B)	4/02	41	11.1	14.4	11.3
East Fork	3/30	34	9.7	12.3	9.8
Four Mile Park	3/30	26	6.9	10.4	5.1
Fremont Pass	3/30	56	16.9	18.2	16.2
Garfield	3/31	33	10.8	19.9	13.0
Hermit Lake	3/30	37	7.8	16.1	---
Monarch Pass	3/31	44	12.9	24.4	17.1
Tennessee Pass	3/30	38	10.8	13.5	10.6
Twin Lakes Tunnel	3/26	36	10.0	14.8	10.7
Westcliffe	3/30	28	6.4	13.2	6.3
Cucharas River					
Apishapa	3/30	26	8.4	10.6	---
Cucharas Creek	3/30	42	10.0	12.9	---
La Veta Pass (B)	3/30	36	7.7	13.4	7.4
Purgatoire River					
Bourbon	3/30	34	6.6	11.3	7.0
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	4/01	21	6.7	10.3	5.3
Summitville	3/29	76	23.4	25.8	18.6
Conejos River					
Cumbres	3/26	52	18.5	24.5	18.0
La Manga	3/26	63	21.0	27.6	---
Platoro	3/30	64	20.3	22.4	16.3
River Springs	3/30	12	3.8	9.4	4.6
Culebra River					
Brown Cabin	3/31	5	1.6	12.2	---
Cottonwood (B)	NS	--	---	---	---
Culebra	3/30	38	7.7	12.6	8.4
La Veta Pass (B)	3/30	36	7.7	13.4	7.4
Trinchera (B)	3/31	32	7.7	10.5	---
Rio Grande					
Cochetopa Pass	3/29	23	5.0	9.6	5.9
Grayback	3/29	64	20.0	21.7	---
Hiway	3/29	93	29.6	34.7	23.8
Lake Humphrey	3/31	29	9.5	10.8	6.1
Love Lake	3/30	38	12.1	14.3	---
Pass Creek	3/29	50	15.9	18.2	9.8
Pool Table	3/30	25	5.8	6.4	6.1
Porcupine	3/29	36	10.4	16.7	10.5
Santa Maria	3/30	13	3.2	10.6	3.6
Upper Rio Grande	3/30	29	8.7	14.2	7.5
Wolf Creek Pass	3/29	96	33.2	39.4	25.5
Wolf Cr. Summit (B)	3/20	102	32.0	41.6	28.3
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela	3/29	2	0.3	4.1	2.0
Rio Chama					
Bateman	3/25	34	11.4	17.1	11.7
Capulin	3/26	1	0.5	7.2	2.7
Capulin Peak	3/26	4	1.2	7.5	3.4
Chama Divide	3/26	0	0.0	6.7	1.7
Chamita	3/24	26	8.2	16.4	7.2
Rio Grande					
Alamitos	3/26	10	3.9	10.4	---
Big Tesuque	3/30	12	2.8	8.8	4.6
Cordova	3/26	34	8.9	11.5	10.1
Elk Cabin	3/29	5	1.1	3.5	2.5
Hopewell	3/23	53	19.7	20.5	---
La Cueva	3/29	6	1.8	10.7	---
Pajarito	3/30	0	0.0	0.2	0.0
Pajarito Peak	3/30	0	0.0	2.1	0.3
Palo	3/30	27	8.0	9.7	---
Payrole	3/29	19	6.0	13.6	6.8
Quemazon	3/31	21	5.7	14.4	9.0
Rio En Medio	3/30	27	6.8	12.4	7.4
Sandoval	3/31	8	2.1	8.6	4.2
Senorita Divide	3/30	4	1.1	12.9	---
Taos Canyon	3/30	18	4.9	7.4	3.9
Tres Ritos	3/26	14	4.6	8.0	4.8
Rio Hondo					
Taos Powderhorn	3/31	79	29.7	32.1	---
Red River					
Hematite Park (B)	3/29	19	4.3	6.1	3.5
Red River	3/29	29	8.8	9.2	5.6
Red River #2	3/30	26	8.0	9.1	---

NOTE: NS - No Survey
(B) - On Adjacent Drainage

GPO 834-493

APPENDIX I

SNOW COURSE MEASUREMENTS as of APRIL 1, 1976

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	3/30	40	15.1	19.5	10.2
Lemon #2	3/31	24	8.7	19.4	---
Mineral Creek	3/30	46	15.8	24.6	15.4
Molas Lake	3/30	40	14.6	20.0	12.6
Purgatory	3/30	62	23.6	31.1	---
Red Mt. Pass (B)	3/30	87	32.8	41.5	31.5
Silverton Sub-Sta.	3/30	25	9.8	13.5	5.2
Spud Mountain	3/30	65	26.9	36.1	23.1
Dolores River					
Lizard Head	3/29	51	17.8	25.8	17.2
Lone Cone	3/30	56	20.6	22.1	---
Ophir Loop	3/29	46	12.0	---	---
Rico	3/29	15	4.6	12.2	6.1
Telluride	3/29	25	8.0	13.5	6.5
Trout Lake	3/29	44	14.7	22.6	13.7
San Juan River					
Chama Divide (B)	3/26	0	0.0	6.7	1.7
Chamita (B)	3/24	26	8.2	16.4	7.2
Upper San Juan	3/29	98	34.2	43.5	28.6
Wolf Cr. Pass (B)	3/29	96	33.2	39.4	25.5
Wolf Cr. Summit	3/29	102	32.0	41.6	28.3
GUNNISON BASIN					
Gunnison River					
Alexander Lake	3/30	58	21.1	26.5	22.8
Blue Mesa	3/30	28	8.1	11.7	7.2
Butte	3/31	41	14.0	17.9	---
Cochetopa Pass (B)	3/29	23	5.0	9.6	5.9
Crested Butte	3/31	43	14.2	18.0	13.0
Keystone	3/31	53	19.5	25.3	20.0
Lake City	3/30	27	7.0	10.7	8.0
Mesa Lakes (B)	3/25	46	15.3	22.5	17.6
McClure Pass	3/30	47	16.9	22.6	15.1
Park Cone	3/30	40	11.3	12.7	10.6
Park Reservoir	3/26	74	22.5	30.1	23.8
Porphyry Creek	3/31	51	14.1	22.6	16.9
Tomichi	3/31	39	10.5	18.2	12.6
Surface Creek					
Alexander Lake	3/30	58	21.1	26.5	22.8
Mesa Lakes	3/25	46	15.3	22.5	17.6
Park Reservoir	3/26	74	22.5	30.1	23.8
Uncompahgre River					
Ironton Park	3/30	44	14.3	23.7	10.2
Red Mountain Pass	3/30	87	32.8	41.9	31.5
Telluride (B)	3/29	25	8.0	13.5	6.5
COLORADO BASIN					
Blue River					
Blue River	3/31	29	8.0	10.8	8.5
Fremont Pass	3/30	56	16.9	18.2	16.2
Frisco Pass	3/26	26	6.8	10.6	7.4
Grizzly Peak	3/26	51	15.3	22.3	18.9
Hoosier Pass (B)	3/31	42	11.7	17.5	12.9
Shrine Pass	3/30	57	16.7	20.9	18.1
Snake River	3/26	25	7.0	8.7	7.9
Summit Ranch	3/31	24	6.6	8.5	7.1
Colorado River					
Arrow	3/30	46	13.9	16.2	13.2
Berthoud Pass	3/30	48	14.0	15.9	15.9
Berthoud Summit	3/29	55	16.1	19.2	19.7
Cooper Hill	4/02	41	11.1	14.4	11.3
Fiddler Gulch	4/01	47	13.5	16.6	14.5
Glenmar Ranch	3/30	30	8.8	10.4	8.5
Gore Pass	3/31	34	11.5	13.4	10.2
Grand Lake	3/28	31	8.0	8.8	8.2
Lake Irene	3/28	59	19.5	21.6	20.9
Lapland	3/30	28	8.0	11.3	10.4
Lulu	3/31	59	19.4	21.6	18.7
Lynx Pass	3/31	42	13.8	16.8	12.8
McKenzie Gulch	3/30	24	6.8	9.2	5.0
Middle Fork	3/30	31	8.7	10.9	9.9
Milner	3/28	36	11.3	12.6	13.6
North Inlet	3/29	26	7.2	8.6	8.7
Pando	3/30	35	9.7	13.1	10.3
Phantom Valley	3/28	28	8.3	10.3	10.8
Ranch Creek	3/30	36	8.6	9.2	9.9
Tennessee Pass (B)	3/30	38	10.8	13.5	10.6
Vail Pass	Destroyed		---	18.6	17.3
Vasquez	3/30	43	11.7	12.8	12.9
Roaring Fork					
Aspen	3/28	58	18.7	21.4	17.1
Independence Pass	3/26	47	15.0	20.2	17.5
Ivanhoe	3/29	62	18.1	21.7	18.1
Kiln	3/29	48	13.7	16.8	---
Lift	3/28	52	17.0	26.3	17.8
McClure Pass	3/30	47	16.9	22.6	15.1
Nast	3/29	24	6.5	9.9	5.6
North Lost Trail	3/30	45	16.3	19.8	14.6
Williams Fork River					
Glenmar Ranch	3/30	30	8.8	10.4	8.5
Jones Pass	3/30	50	14.0	16.7	15.5
Middle Fork	3/30	31	8.7	10.9	9.9
Willow Creek					
Granby	3/30	26	7.3	8.1	7.5
Willow Cr. Pass	3/30	41	12.2	14.0	12.7
Plateau Creek					
Mesa Lakes	3/25	46	15.3	22.5	17.6
Park Reservoir	3/26	74	22.5	30.1	23.8
Trickle Divide	3/26	80	25.0	30.2	25.9
YAMPA BASIN					
Elk River					
Elk River	3/25	47	15.4	21.2	17.8
Hahn's Peak	3/25	40	12.7	17.9	13.7
White River					
Burro Mountain	3/30	56	19.1	21.9	17.2
Rio Blanco	3/29	46	13.9	18.3	15.7
Yampa River					
Bear River	3/26	42	11.6	13.7	11.2
Columbine (B)	3/25	58	20.3	29.5	24.0
Crosho	3/26	46	13.4	16.5	---
Dry Lake	3/29	53	17.0	23.1	20.0
Lynx Pass (B)	3/31	42	13.8	16.8	12.8
Rabbit Ears	3/25	59	19.4	30.0	25.9
Tower	3/29	114	40.2	54.5	---
Yampa View	3/25	41	12.6	18.4	14.6

NOTE: NS - No Survey
(B) - On Adjacent Drainage

CC

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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Collaborating with
COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
MAY 1, 1976

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SURVEYOR ENROUTE TO THE MT. BALDY ARIZONA SNOW COURSE
S S PHOTO AZ-5460

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacromento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OREG 1978

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C

Released by

M. D. BURDICK

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

ALBERT W. HAMELSTROM

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN

DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
BERNARD A. SHAFER, Assistant Snow Survey Supervisor
JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Masca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

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WATER SUPPLY OUTLOOK

as of

MAY 1, 1976

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
MAY 1, 1976

THE SNOW SEASON IS NEARLY OVER IN BOTH COLORADO AND NEW MEXICO. SOME VERY HIGH ELEVATION SNOWS ARE LIKELY TO OCCUR. ONLY UNDER VERY UNUSUAL CONDITIONS WOULD THESE SNOWS EFFECT SUMMER STREAMFLOWS. NO SERIOUS WATER SHORTAGES ARE EXPECTED IF SUMMER PRECIPITATION IS NEAR NORMAL, HOWEVER, SOME SHORTAGES CAN BE EXPECTED IN BOTH STATES. CARRYOVER STORAGE IS GENERALLY GOOD EXCEPT ON THE ARKANSAS RIVER IN COLORADO. FORECASTS ARE BASED ON NORMAL CLIMATIC CONDITIONS FOR THE REMAINDER OF THE YEAR.

COLORADO -- IRRIGATORS AND OTHER WATER USERS ON THE EAST SLOPE OF COLORADO COULD HAVE SOME WATER SHORTAGES THIS SUMMER. THEY SHOULD NOT BE SEVERE. THE WESTERN SLOPE AND RIO GRANDE WATER USERS SHOULD HAVE ADEQUATE WATER SUPPLIES. STREAMFLOW FORECASTS IN THE STATE RANGE FROM 70% OF AVERAGE TO 110%. VALLEY SOIL MOISTURE IS REPORTED AS ONLY POOR TO FAIR DESPITE A WEEK OF CLOUDY RAINY WEATHER. CARRYOVER STORAGE IS GOOD AND WILL PROVIDE AN EXCELLENT SUPPLEMENTAL SUPPLY EXCEPT IN THE ARKANSAS BASIN. STORAGE IS VERY SHORT BELOW PUEBLO.

NEW MEXICO -- SOME WATER SHORTAGES COULD EXIST ALONG NEW MEXICO'S SMALLER SNOW-MELT STREAMS. FORECASTS OF STREAMFLOW RANGE FROM 70% TO 90% OF THE 15-YEAR AVERAGE. WATER USERS ALONG THE MAINSTEM OF THE RIO GRANDE, CHAMA, AND SAN JUAN SHOULD HAVE ADEQUATE SUPPLIES ESPECIALLY EARLY. CARRYOVER STORAGE IS NEAR NORMAL. SOIL MOISTURE CONDITIONS ARE POOR.

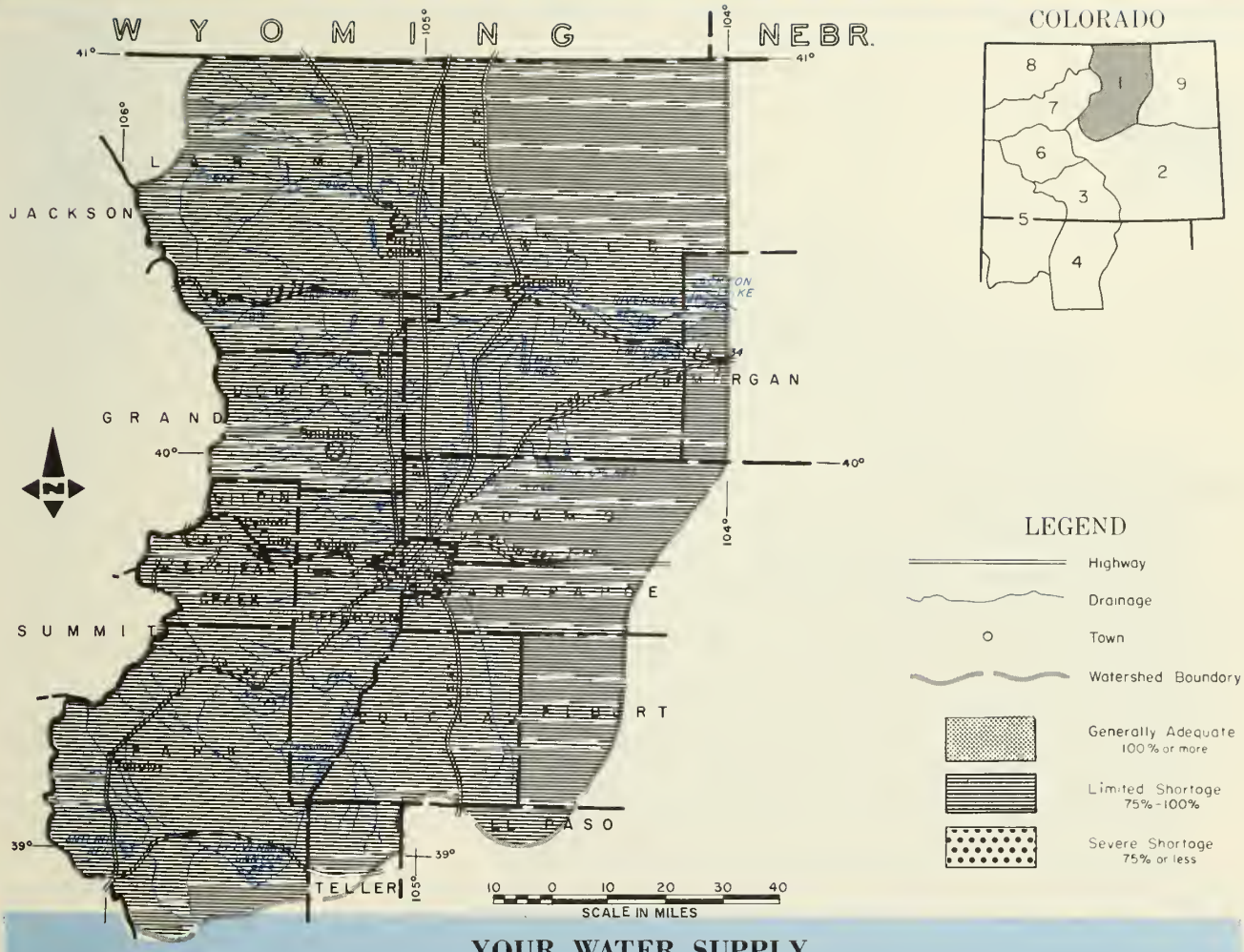
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

MAY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SOME WATER SHORTAGES ARE IN PROSPECT FOR THE SOUTH PLATTE AND ITS NORTHERN TRIBUTARIES. STREAMFLOW FORECASTS RANGE FROM A LOW OF 71% OF NORMAL ON BOULDER AND CLEAR CREEKS TO A HIGH OF 89% ON THE CACHE LA POUDRE. THE ONE OPTOMISTIC NOTE IS THE EXCELLENT CARRYOVER STORAGE. THIS WILL BE AN EXCELLENT SUPPLEMENTAL SUPPLY.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A. MOSS - AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE— SOIL CONSERVATION SERVICE

RODNEY M. ALT - AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Big Thompson River at Drake (1)	88	82	107
Boulder Creek at Orodell	35	71	49
Cache La Poudre River at Canyon Mouth (2)	220	89	247
Clear Creek at Golden (3)	90	71	127
St. Vrain Creek at Lyons (4)	60	80	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Avg.	Fair
Coal Creek	Avg.	Fair
North Fork of South Platte	Avg.	Fair
North Fork of Cache La Poudre	Avg.	Fair
Ralston Creek	Avg.	Fair
Rock Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Big Thompson	5	71	81
Boulder	3	81	83
Cache La Poudre	7	89	99
Clear Creek	6	77	85
Saint Vrain	3	68	90
South Platte	3	62	88

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Antero	33	16	16	14
Barr Lake	32	27	29	26
Black Hollow	8	5	5	4
Boyd Lake	44	40	36	38
Cache La Poudre	10	7	7	9
Carter Lake	109	106	109	99
Chambers Lake	9	3	4	4
Cheesman	79	43	50	60
Cobb Lake	34	15	17	15
Eleven Mile	98	98	97	89
Fossil Creek	12	9	7	8
Gross	43	14	14	23
Halligan	6	2	6	6
Horsetooth	144	126	115	121
Lake Loveland	14	9	10	10
Lone Tree	9	6	8	8
Mariano	5	5	5	5
Marshall	10	–	8	6
Marston	18	15	16	16
Milton	24	18	18	15
Standley	42	–	34	20
Terry	8	6	6	6
Union	13	11	12	10
Windsor	19	15	13	13

* 1958-1972 period.

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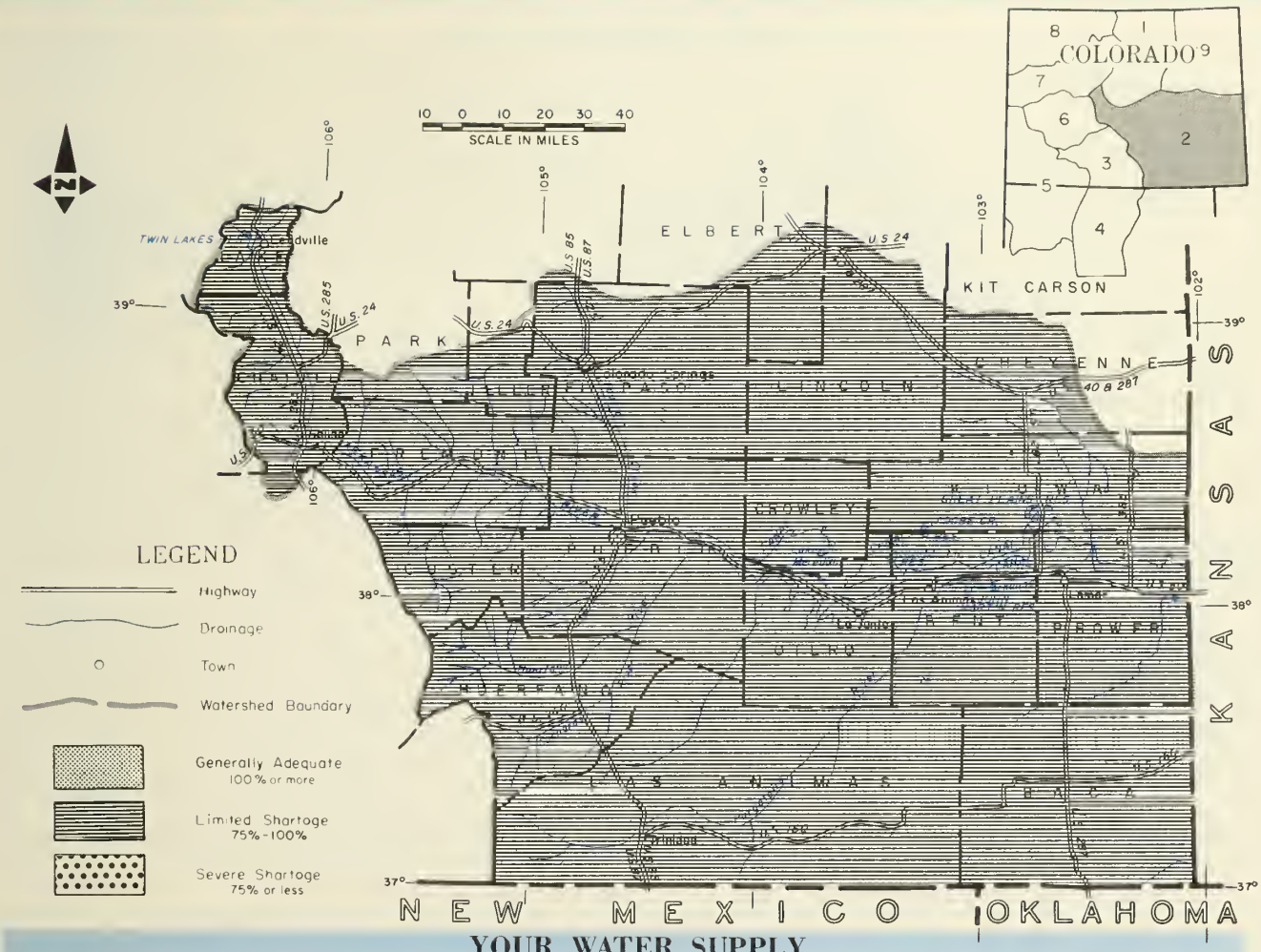
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

MAY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THERE COULD BE SOME WATER SHORTAGES IN THE ARKANSAS BASIN THIS SUMMER. THEY SHOULD NOT BE SEVERE IF WE HAVE A NORMAL MELT PERIOD. FORECASTS RANGE FROM 80% OF NORMAL ON THE PURGATOIRE TO 91% ON THE ARKANSAS MAINSTEM. SOIL MOISTURE IS LISTED AS POOR TO FAIR. CARRYOVER STORAGE IS ALMOST NON-EXISTENT. WATER SUPPLY FORECASTS ARE BASED ON NEAR NORMAL CLIMATIC CONDITIONS FOR THE REMAINDER OF THE YEAR.

This report prepared by

JACK N WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

DONALD A MOSS – AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

D W GILLASPIE AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Arkansas River near Pueblo (1)	265	91	290
Arkansas River at Salida (1)	280	90	313
Cucharas River near La Veta	8	80	10
Huerfano River near Redwing	13	87	15
Purgatoire River at Trinidad	30	80	38

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Apishapa River	Fair	Poor
Fountain Creek	Fair	Poor
Grape Creek	Fair	Poor
Hardscrabble Creek	Fair	Poor
Monument Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Arkansas	10	49	79
Cucharas	--	--	--
Purgatoire	1	--	16

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Adobe	62	0	0	16
Clear Creek	11	5	0	8
Cucharas	40	0	0	3
Great Plains	150	0	0	57
Horse Creek	27	4	0	7
John Martin	354	0	0	73
Meredith	42	0	0	13
Model	15	0	0	3
Turquoise	121	42	34	--
Twin Lakes	58	10	11	22
Pueblo	354	24	--	--

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

MAY 1, 1976

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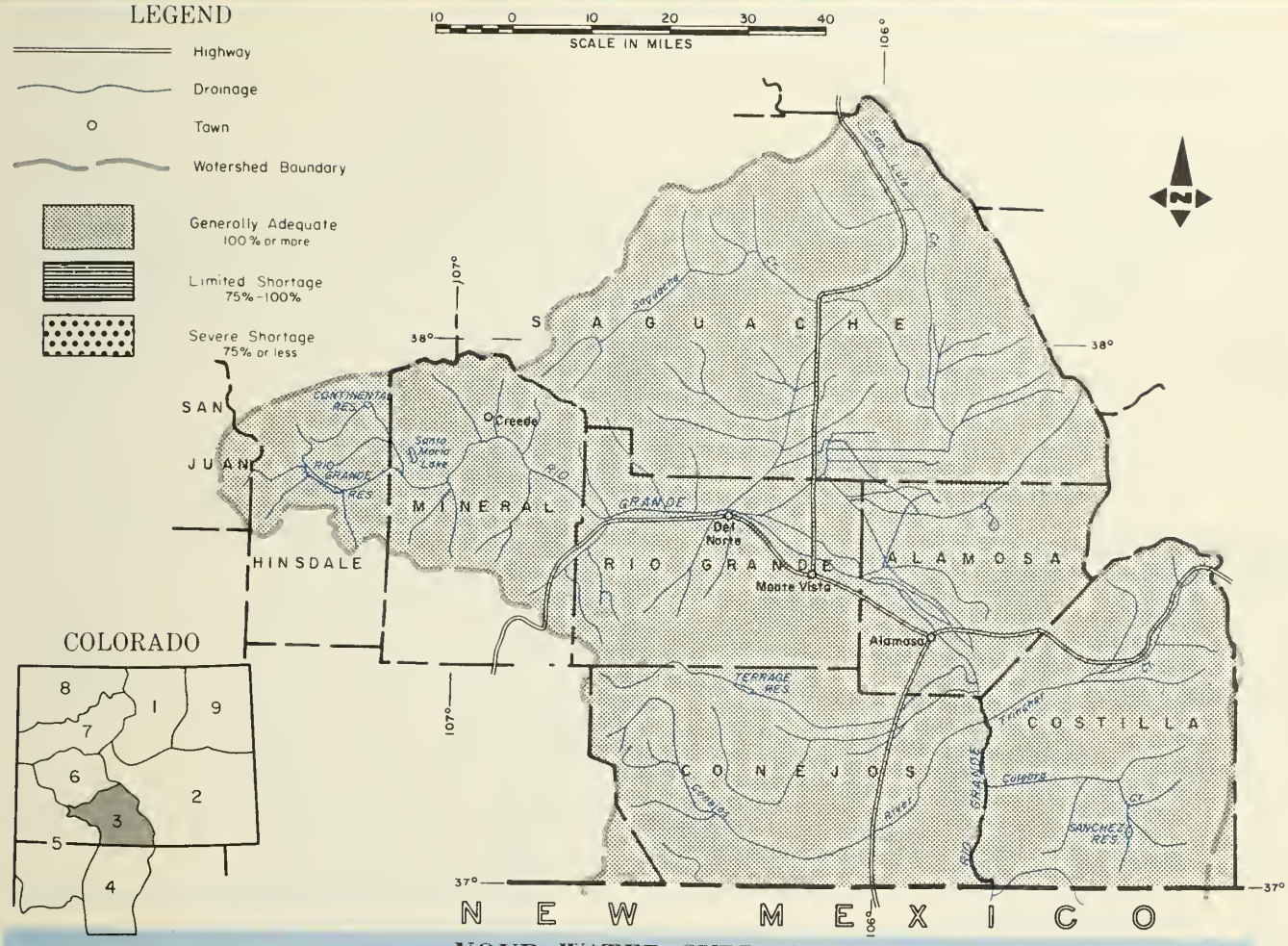
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES SHOULD BE ADEQUATE FOR ALL USERS IN THE RIO GRANDE BASIN THIS SUMMER. FORECASTS BASED ON WINTER SNOWPACK ARE FOR BETTER THAN AVERAGE STREAMFLOW. THE SNOWPACK AT THE HIGHER ELEVATIONS IS EXTREMELY GOOD. CARRY-OVER STORAGE IS NORMAL. FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK – STATE CONSERVATIONIST
DENVER, COLORADO

D. W. GILLASPIE – AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	* Average
Alamosa Creek above Terrace Reservoir	70	89	62
Conejos River near Mogote (1)	200	109	184
Culebra Creek at San Luis (2)	17	100	17
Rio Grande at 30 Mile Bridge (3)	135	112	121
Rio Grande near Del Norte (3)	525	112	468
South Fork of Rio Grande at South Fork	130	113	115

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Avg.	Avg.
Sangre de Cristo Cr.	Avg.	Avg.
Trinchera Creek	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Alamosa	2	70	131
Conejos	2	61	133
Culebra	2	49	138
Rio Grande	10	59	126

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average *
Continental	27	6	4	7
Platoro	60	14	19	10
Rio Grande	46	20	10	20
Sanchez	103	7	7	15
Santa Maria	45	10	5	8
Terrace	18	--	5	7

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

MAY 1, 1976

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75% - 100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

A LIMITED NUMBER OF SNOW COURSES ARE READ ON MAY 1 IN NEW MEXICO. THESE INDICATED NEAR NORMAL WEATHER CONDITIONS PREVAILED IN THE MOUNTAINS DURING APRIL. AS A RESULT ALL FORECASTS ARE THE SAME AS LAST MONTH AND RANGE FROM SLIGHTLY ABOVE AVERAGE ON MAJOR RIVERS TO NORMAL ON SMALL STREAMS. RESERVOIR STORAGE IS HIGHLY VARIABLE.

This report prepared by

JACK N WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

A W HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE NEW MEXICO

JAMES E TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE— SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) March—July

FORECAST POINT	FORE-CAST	% of Average	Average *
Costilla Creek at Costilla (1)	17	89	19
Jemez River near Jemez	22	76	29
Pecos River at Pecos	35	85	41
Red River at Mouth near Questa	27	93	29
Rio Chama at El Vado	200	105	190
Rio Grande at Otowi (2)	600	114	526
Rio Grande at San Marcial (2)	415	117	355
Rio Hondo near Valdez	14	100	14
Santa Cruz River at Cundiyo	10	77	13

(1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo Creek	Avg.	Avg.
Mora River	Avg.	Poor
Nambe Creek	Avg.	Avg.
Rio Ojo Caliante	Avg.	Avg.
Rio Pueblo de Taos	Avg.	Avg.
Santa Fe Creek	Avg.	Avg.

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Alamogordo	111	5	52	62
Avalon	5	1	2	--
Caballo	344	58	73	83
Conchas	273	81	132	175
El Vado	195	157	131	28
Elephant Butte	2195	576	372	380
McMillan	34	9	15	--

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
MAY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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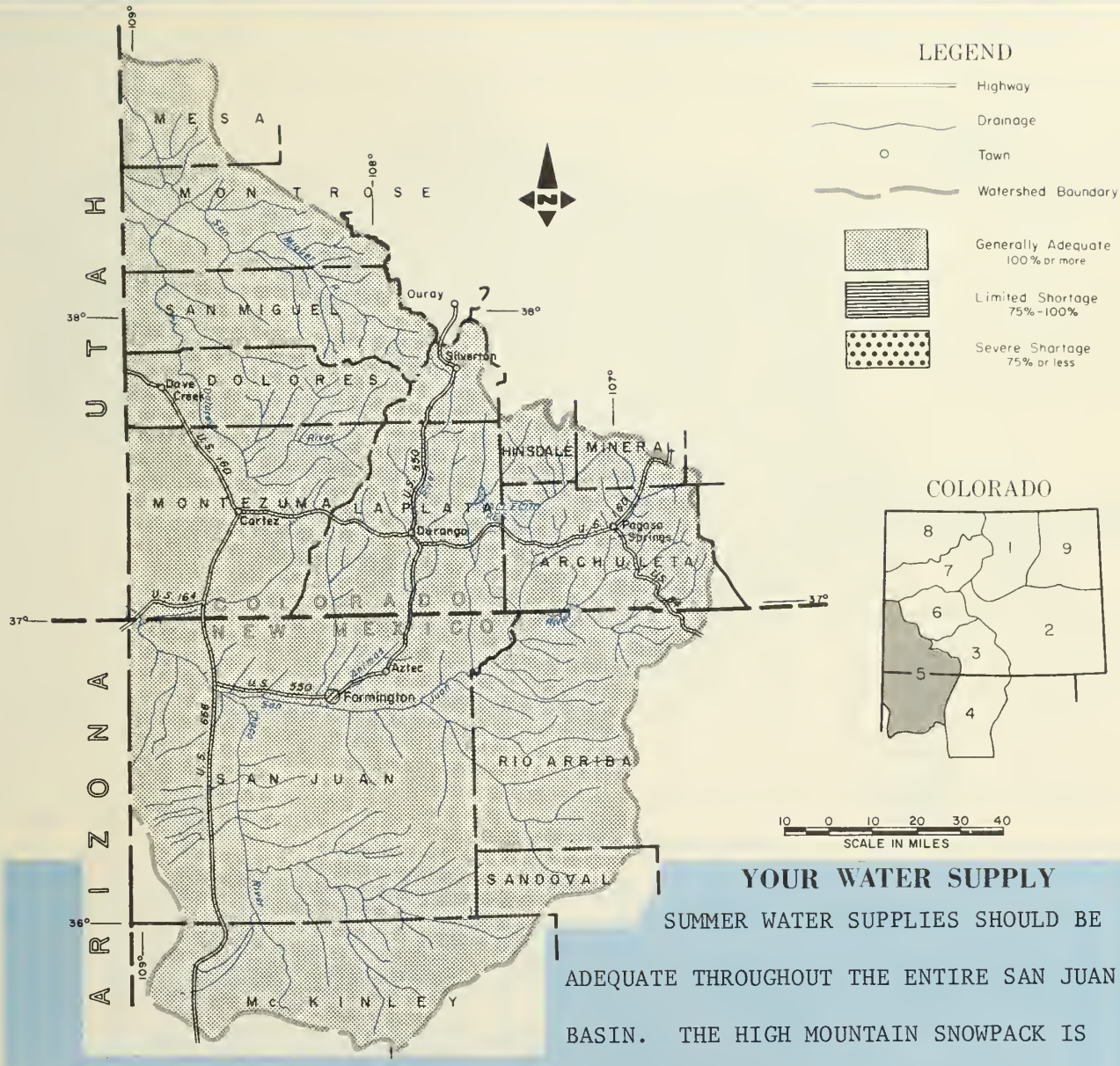

YOUR WATER SUPPLY

SUMMER WATER SUPPLIES SHOULD BE ADEQUATE THROUGHOUT THE ENTIRE SAN JUAN BASIN. THE HIGH MOUNTAIN SNOWPACK IS MUCH ABOVE NORMAL. CARRYOVER STORAGE IS BETTER THAN USUAL. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS IS REPORTED AS ONLY FAIR. FORECASTS ARE BASED ON NORMAL CLIMATIC CONDITIONS FOR THE REMAINDER OF THE YEAR.

This report prepared by

JACK N WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK—STATE CONSERVATIONIST
DENVER, COLORADO

A W HAMELSTROM STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D W GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Animas River at Durango	450	106	423
Dolores River at Dolores	240	103	232
La Plata River at Hesperus	24	100	24
Los Pinos River at Bayfield (1)	205	104	198
Mancos River near Towac	16	114	14
Inflow to Navajo River (1 & 2)	680	114	597
Piedra Creek at Arboles	210	114	185
San Juan River at Carracas	400	113	354
San Miguel River at Placerville	140	108	130

(1) Observed flow plus change in storage in Vallicito Reservoir. (2) April – July

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida River	Exc.	Avg.
Hermosa Creek	Exc.	Avg.
West Dolores River	Exc.	Avg.
Williams Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Animas	6	49	102
Dolores	4	28	80
San Juan	4	70	127

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Groundhog	22	12	9	12
Jackson Gulch	10	8	7	7
Lemon	40	25	8	25
Navajo	1696	1120	1054	944*
Vallecito	126	74	29	68

*Less than 15 yrs.

* 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

MAY 1, 1976

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

PROSPECTIVE WATER SUPPLIES FOR THE ENTIRE BASIN ARE ALL AVERAGE OR ABOVE. APRIL BROUGHT NEAR AVERAGE PRECIPITATION IN THE MOUNTAIN AREAS. LOW ELEVATION MELT PROGRESSED NORMALLY DURING APRIL. SOIL MOISTURE IN IRRIGATED AREAS HAS IMPROVED SOMEWHAT FROM LAST MONTH BUT REMAINS RATED AS FAIR. RESERVOIR STORAGE IS EXCELLENT PRIOR TO THE BEGINNING OF THE MAIN SPRING RUNOFF.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK - STATE CONSERVATIONIST
DENVER COLORADO

DUANE L. JOHNSON - AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Gunnison River inflow to Blue Mesa Reservoir (1)	840	106	793
Gunnison River near Grand Junction (2)	1250	106	1184
North Fork of Gunnison (3)	280	106	263
Surface Creek near Cedaredge	16	100	16
Uncompahgre River at Colona	150	112	134

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ohio Creek	Avg.	Avg.
Slate River	Avg.	Avg.
Taylor River	Avg.	Avg.
Tomichi Creek	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Gunnison	12	55	93
Surface Creek	3	75	107
Uncompahgre	3	51	105

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Blue Mesa	830	431	260	308
Morrow Point	121	116	114	115
Taylor	106	57	50	62

* 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
MAY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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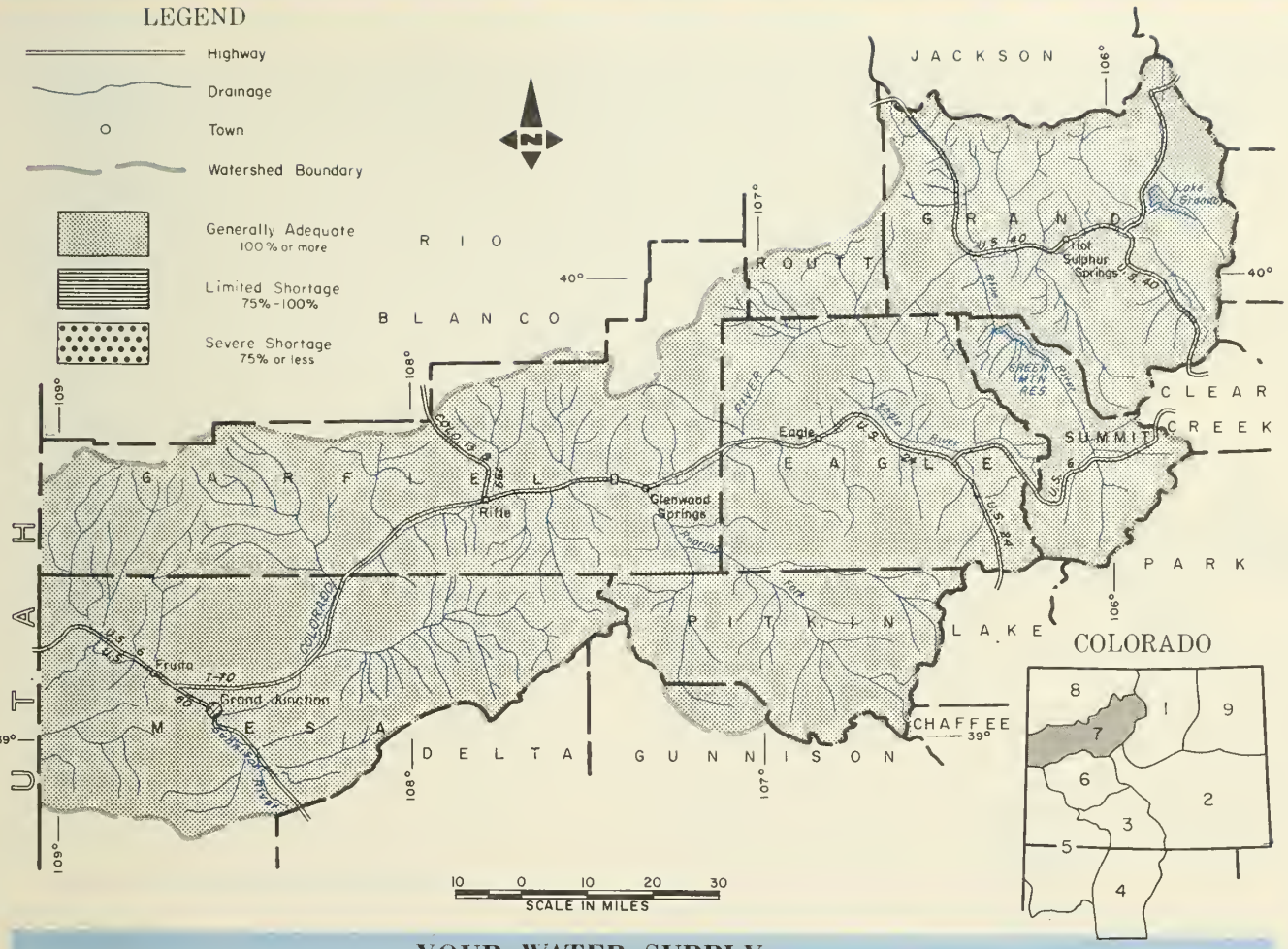

YOUR WATER SUPPLY

SPRING AND SUMMER STREAMFLOW IS FORECAST TO BE SLIGHTLY BELOW AVERAGE FOR NEARLY ALL THE BASIN BARRING ABNORMAL SPRING PRECIPITATION. WATER SUPPLIES SHOULD BE ADEQUATE TO MEET ALL DEMANDS, HOWEVER, THE MOUNTAIN SNOWPACK VARIES FROM A LOW OF NEAR 75% OF NORMAL IN THE UPPER COLORADO TO 112% ON PLATEAU CREEK. RESERVOIR STORAGE IS NEAR AVERAGE FOR THIS TIME OF YEAR. VALLEY SOIL MOISTURE IS RATED AS FAIR.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK—STATE CONSERVATIONIST
DENVER, COLORADO

DUANE L JOHNSON—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Blue River inflow to Dillon Reservoir	145	86	169
Blue River inflow to Green Mountain Reservoir (1)	265	89	297
Colorado River near Cameo (6)	2200	93	2370
Colorado River near Dotsero (3)	1300	91	1434
Colorado River inflow to Granby Reservoir (2)	200	88	228
Roaring Fork at Glenwood Springs (4)	710	85	713
Williams Fork near Parshall (5)	50	80	63
Willow Creek inflow to Willow Creek Reservoir	45	96	47

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Avg.	Fair
Eagle River	Avg.	Fair
Gypsum Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Blue River	8	74	88
Colorado	20	68	76
Plateau	3	80	112
Roaring Fork	7	78	105
Williams Fork	3	60	77
Willow	2	72	97

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Dillon	254	224	205	229
Granby	466	275	278	209
Green Mountain	139	53	44	45
Homestake	43	0	25	11
Ruedi	101	55	53	55
Vega	32	15	9	15
Williams Fork	97	45	35	29
Willow Creek	9	7	6	6

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
MAY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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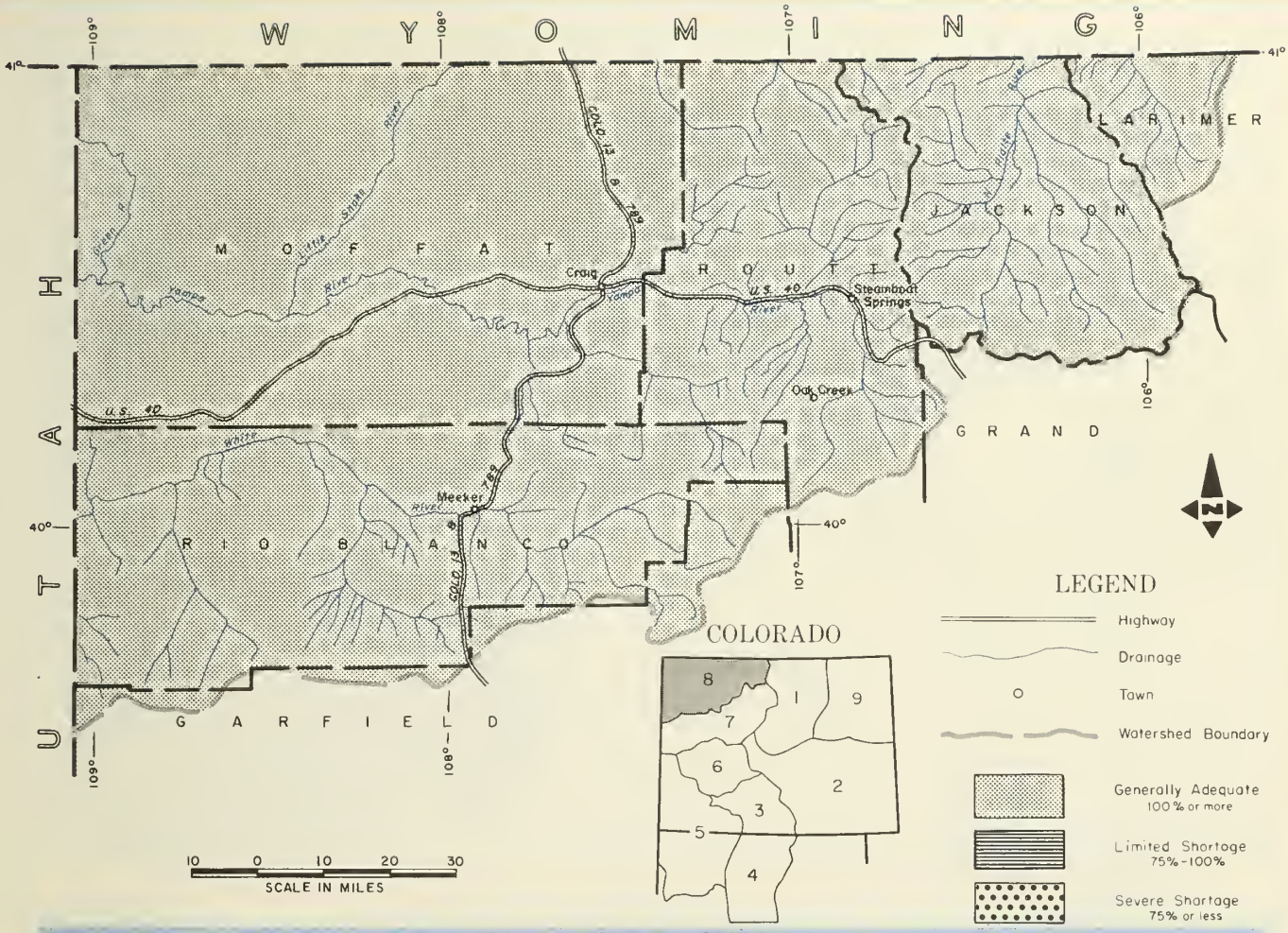

YOUR WATER SUPPLY

NEAR NORMAL AMOUNTS OF PRECIPITATION WERE RECEIVED IN MOUNTAIN AREAS DURING APRIL. AS A RESULT, STREAMFLOW FORECASTS FOR THE MAJOR RUNOFF PERIOD ARE ABOUT THE SAME AS LAST MONTH. THEY RANGE FROM NEAR AVERAGE ON THE WHITE TO ABOUT 15% BELOW ON THE YAMPA. LOW ELEVATION MELT HAS PROGRESSED NORMALLY THROUGH APRIL.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

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DENVER, COLORADO

DUANE L. JOHNSON, AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Elk River at Clark	185	93	198
Laramie River near Woods	140	110	127
Little Snake River at Lily	295	91	324
North Platte River at Northgate	245	102	240
White River near Meeker	295	100	295
Yampa River near Maybell	770	85	905
Yampa River at Steamboat Springs	230	84	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Avg.	Fair
Hunt Creek	Avg.	Fair
Illinois River	Avg.	Fair
Michigan River	Avg.	Fair
Oak Creek	Avg.	Fair
Trout Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Elk	2	61	94
Laramie	3	114	109
North Platte	5	81	96
White	2	64	106
Yampa	6	62	84

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
MAY 1, 1976

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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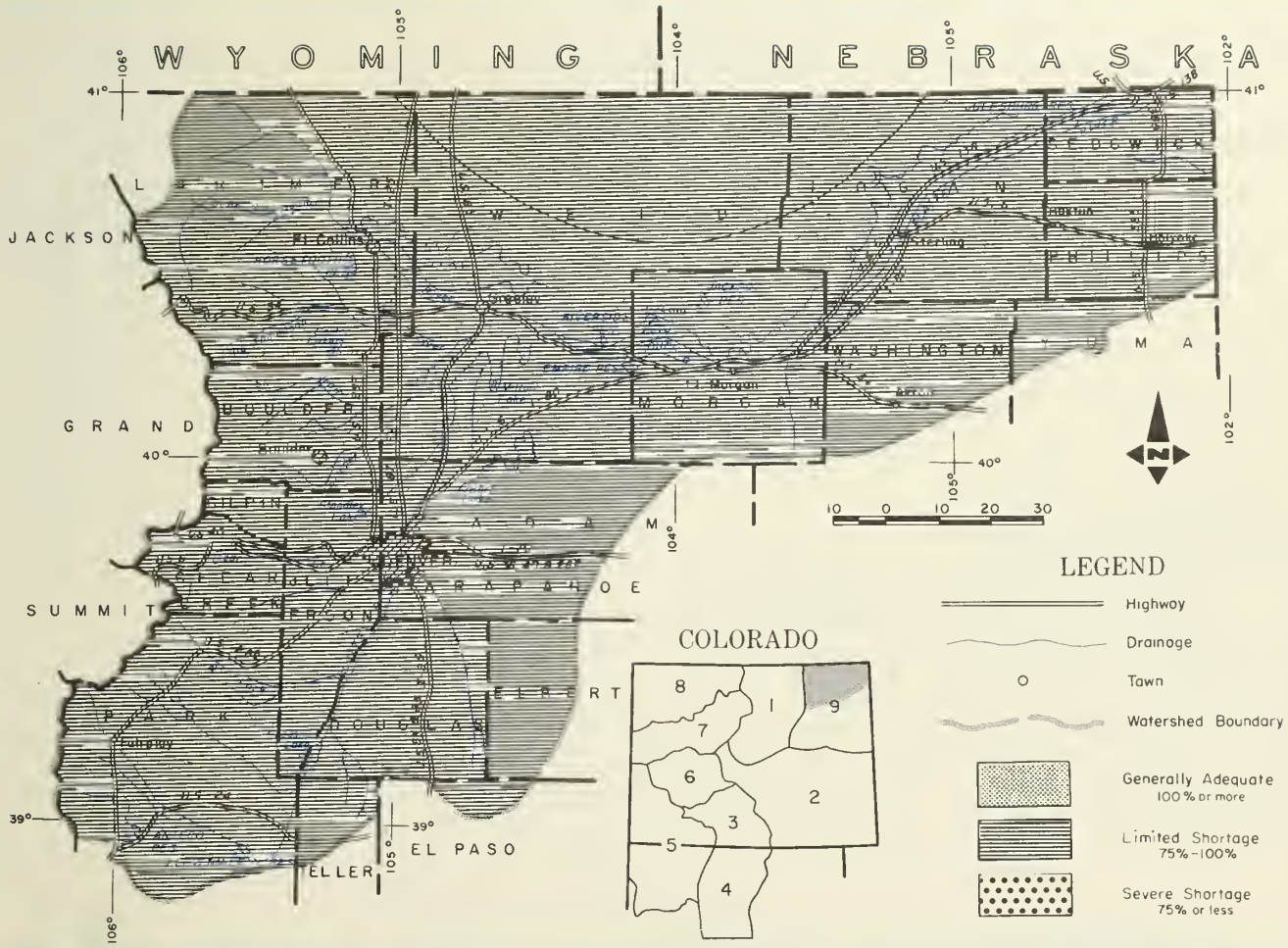

YOUR WATER SUPPLY

CARRYOVER STORAGE IS SLIGHTLY BETTER THAN NORMAL ON THE LOWER PLATTE DRAINAGE AND WILL HELP OFFSET THE BELOW AVERAGE STREAMFLOW. FOR THE FIRST TIME IN SEVERAL YEARS SUMMER FLOWS ARE EXPECTED TO BE CONSIDERABLY BELOW NORMAL. EARLY SEASON FLOW SHOULD BE NEAR NORMAL, BUT LATE SEASON FLOWS WILL BE POOR.

This report prepared by

JACK N WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M D BURDICK - STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M ALT AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	88	82	107
Boulder Creek at Orodell	35	71	49
Cache La Poudre River at Canyon Mouth (2)	220	89	247
Clear Creek at Golden (3)	90	71	127
Saint Vrain Creek at Lyons (4)	60	80	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
South Platte from Greeley to Fort Morgan	Fair	Poor
South Platte from Fort Morgan to Sterling	Fair	Poor
South Platte below Sterling	Fair	Poor

SUMMARY of SNOW MEASUREMENTS
(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average*
Big Thompson	5	71	81
Boulder	3	81	83
Cache La Poudre	7	89	99
Clear Creek	6	77	85
Saint Vrain	3	68	90
South Platte	3	62	88

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Carter	109	106	109	99
Cheesman	79	43	50	60
Eleven Mile	98	98	97	89
Empire	38	35	35	33
Horsetooth	144	126	115	121
Jackson	35	32	35	33
Julesburg	28	24	24	23
Point of Rocks	70	72	70	66
Prewitt	33	27	27	23
Riverside	58	58	60	58

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APPENDIX I

SNOW COURSE MEASUREMENTS as of MAY 1, 1976

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	AVG. 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	4/28	45	16.1	16.0	18.0
McIntyre	4/27	30	11.3	9.7	10.1
Roach	4/27	64	23.4	19.0	18.5
North Platte River					
Cameron Pass	4/27	77	37.0	33.6	31.2
Columbine Lodge	4/29	32	14.2	27.9	22.0
Northgate	4/27	10	3.4	4.2	3.7
Park View	4/28	19	6.4	9.2	6.5
Willow Cr. Pass (B)	4/28	28	10.5	13.3	11.0
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	4/28	8	2.5	5.7	3.9
Boulder Falls	4/29	29	11.3	13.3	13.1
University Camp	4/29	45	16.9	19.1	19.9
Big Thompson River					
Deer Ridge	4/30	1	0.2	6.4	2.7
Hidden Valley	4/30	30	9.4	11.7	11.6
Lake Irene (B)	4/28	55	19.1	22.8	22.9
Long's Peak	4/30	37	11.4	17.1	12.5
Two Mile	4/30	49	14.8	19.7	17.9
Cache La Poudre					
Bennett Creek	4/28	14	3.9	5.8	---
Big South	4/26	0	0.0	0.2	0.6
Cameron Pass	4/27	77	37.0	33.6	31.2
Chambers Lake	4/26	9	4.4	10.9	6.0
Deadman Hill	4/28	45	16.1	16.0	18.0
Hourglass Lake	4/28	20	5.2	6.8	6.0
Joe Wright	4/27	68	26.8	28.0	---
Lost Lake	4/26	27	9.2	12.7	9.9
Red Feather	4/28	17	4.5	5.5	5.1
Clear Creek					
Baltimore (B)	4/28	8	2.5	5.7	3.9
Berthoud Falls	4/28	25	8.6	15.6	12.4
Empire	4/28	25	7.7	10.3	6.9
Grizzly Peak (B)	4/28	52	17.9	21.1	20.1
Loveland Lift	4/28	55	17.5	22.5	24.0
Loveland Pass	4/28	40	16.1	16.4	15.0
St. Vrain River					
Copeland Lake	4/30	6	1.8	5.2	2.4
Ward	4/29	14	4.8	6.7	5.6
Wild Basin	4/30	35	11.6	14.8	12.3
South Platte River					
Como	4/29	12	4.0	8.1	---
Geneva Park	4/30	7	1.4	3.3	1.9
Horseshoe Mt.	4/28	29	9.6	14.0	---
Hoosier Pass	4/30	38	11.8	17.6	12.9
Jefferson Creek	4/29	23	7.0	11.7	8.1
Mosquito	4/29	11	3.8	13.4	---
Trout Creek Pass	4/28	0	0.0	5.6	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	4/28	7	2.0	7.7	3.6
Cooper Hill (B)	5/03	40	11.8	13.0	12.1
East Fork	4/29	16	5.7	10.3	7.5
Four Mile Park	4/28	2	0.4	5.1	1.4
Fremont Pass	4/29	54	17.9	20.7	18.1
Garfield	4/30	18	6.5	19.9	8.6
Hermit Lake	4/29	9	2.7	18.0	---
Monarch Pass	4/30	33	10.9	24.8	16.3
Tennessee Pass	4/29	20	4.6	13.0	8.5
Twin Lakes Tunnel	4/29	29	8.6	13.4	9.4
Westcliffe	4/29	0	0.0	11.5	1.6

NOTE: NS - No Survey
(B) - On Adjacent Drainage

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	AVG. 58-72
Cucharas River					
Apishapa	4/29	0	0.0	5.7	3.3
Cucharas Creek	4/28	14	4.7	10.9	---
La Veta Pass (B)	4/28	0	0.0	7.3	2.1
Purgatoire River					
Bourbon	4/29	2	0.4	7.3	2.5
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	4/28	0	0.0	6.4	0.7
Summitville	4/26	74	25.9	30.4	19.0
Conejos River					
Cumbres	4/30	31	15.3	26.3	13.7
La Manga	4/30	45	18.6	29.2	---
Platoro	4/29	40	16.9	26.5	10.5
River Springs	4/30	0	0.0	---	0.3
Culebra River					
Brown Cabin	NS	--	---	5.9	---
Cottonwood (B)	NS	--	---	---	---
Culebra	4/28	24	8.3	9.5	3.9
La Veta Pass (B)	4/28	0	0.0	7.3	2.1
Trinchera (B)	NS	--	---	9.4	---
Rio Grande					
Cochetopa Pass	4/27	10	2.9	10.5	3.3
Grayback	4/26	57	20.2	24.1	---
Hiway	4/30	82	31.8	39.4	25.8
Lake Humphrey	4/27	3	1.3	9.1	0.9
Love Lake	4/27	18	6.5	14.1	---
Pass Creek	4/30	19	7.1	18.4	3.5
Pool Table	4/27	12	3.3	8.4	2.4
Porcupine	4/29	24	7.2	16.4	7.4
Santa Maria	4/29	0	0.0	7.3	0.8
Upper Rio Grande	4/29	9	3.5	13.5	2.2
Wolf Creek Pass	4/30	68	31.4	43.2	21.5
Wolf Cr. Summit (B)	4/30	87	35.2	42.9	30.4
RIO GRANDE BASIN-NM					
Chamita	4/30	0	0.0	8.5	0.2
Hopewell	4/28	24	9.7	24.3	---
Rio En Medio	4/29	0	0.0	7.6	---

APPENDIX I

SNOW COURSE MEASUREMENTS as of MAY 1, 1976

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	4/28	0	0.0	18.7	4.2
Lemon #2	4/30	0	0.0	17.3	---
Mineral Creek	4/28	30	12.6	24.8	11.6
Molas Lake	4/28	16	6.2	20.8	7.8
Purgatory	4/28	41	17.4	34.3	---
Red Mt. Pass (B)	4/28	85	35.1	46.8	32.5
Silverton Sub-Sta.	4/28	0	0.0	10.4	0.3
Spud Mountain	4/28	56	25.6	40.3	21.7
Dolores River					
Lizard Head	4/29	38	9.4	29.5	14.9
Lone Cone	4/29	29	12.0	22.5	---
Ophir Loop	4/28	45	13.9	---	---
Rico	4/29	0	0.0	8.2	0.1
Telluride	4/28	0	0.0	12.5	1.4
Trout Lake	4/28	28	11.1	24.2	9.1
San Juan River					
Chama Divide (B)	NS	--	---	---	0.0
Chamita (B)	4/30	0	0.0	8.5	0.2
Upper San Juan	4/30	67	31.5	45.2	25.0
Wolf Cr. Pass (B)	4/30	68	31.4	43.0	21.5
Wolf Cr. Summit	4/30	87	35.2	42.9	30.4
GUNNISON BASIN					
Gunnison River					
Alexander Lake	4/30	53	21.1	30.9	21.9
Blue Mesa	4/29	0	0.0	9.7	1.7
Butte	4/28	33	12.6	18.4	---
Cochetopa Pass (B)	4/27	10	2.9	10.5	3.3
Crested Butte	4/28	5	1.9	16.3	7.0
Keystone	4/29	34	14.0	24.7	17.2
Lake City	4/28	17	4.8	11.4	4.2
Mesa Lakes (B)	4/27	49	18.0	24.1	15.8
McClure Pass	4/26	26	10.1	19.5	9.1
Park Cone	4/27	22	6.9	11.0	7.3
Park Reservoir	4/28	66	26.7	33.0	24.0
Porphyry Creek	4/30	43	13.4	25.0	16.5
Tomichi	4/30	25	8.2	16.2	10.3
Surface Creek					
Alexander Lake	4/30	53	21.1	30.9	21.9
Mesa Lakes	4/27	49	18.0	24.1	15.8
Park Reservoir	4/28	66	26.7	33.0	24.0
Uncompahgre River					
Ironton Park	4/29	21	8.0	24.7	7.0
Red Mountain Pass	4/28	85	35.1	46.8	32.5
Telluride (B)	4/28	0	0.0	12.5	1.4
COLORADO BASIN					
Blue River					
Blue River	4/30	16	3.8	8.0	5.9
Fremont Pass	4/29	54	17.9	20.7	18.1
Frisco Pass	4/28	12	4.4	8.3	4.7
Grizzly Peak	4/28	52	17.9	21.1	20.1
Hoosier Pass (B)	4/30	38	11.8	17.6	12.9
Shrine Pass	4/29	51	17.9	20.0	20.0
Snake River	4/28	5	1.2	4.3	3.3
Summit Ranch	4/29	14	4.3	7.7	4.9
Colorado River					
Arrow	4/29	25	8.8	12.8	11.1
Berthoud Pass	4/30	37	11.6	16.6	16.0
Berthoud Summit	4/28	54	18.9	21.5	21.1
Cooper Hill	5/03	40	11.8	13.0	12.1
Fiddler Gulch	5/03	35	11.9	18.1	14.5
Glenmar Ranch	4/28	7	2.5	7.1	4.4
Gore Pass	4/29	11	4.7	11.9	7.8
Grand Lake	4/25	17	4.5	6.7	4.0
Lake Irene	4/28	55	19.1	22.8	22.9
Lapland	4/27	18	6.3	10.1	7.3
Lulu	4/29	49	19.1	23.4	20.3
Lynx Pass	4/29	20	8.1	14.7	8.4
McKenzie Gulch	4/29	0	0.0	4.7	1.0
Middle Fork	4/28	12	4.6	9.5	6.2
Milner	4/28	29	10.5	12.5	13.1
North Inlet	4/26	16	4.4	8.9	6.3
Pando	4/29	20	6.7	11.3	8.0
Phantom Valley	4/28	15	5.4	10.1	7.0
Ranch Creek	4/29	24	7.3	7.6	9.4
Tennessee Pass (B)	4/29	20	4.6	13.0	8.5
Vail Pass	Destroyed		---	16.7	15.6
Vasquez	4/29	37	11.4	13.0	12.8
Roaring Fork					
Aspen	4/27	55	23.0	21.6	17.7
Independence Pass	4/29	41	15.1	18.5	16.8
Ivanhoe	4/27	52	20.2	21.9	17.7
Kiln	4/27	38	14.4	16.3	---
Lift	4/27	46	19.3	20.2	19.0
McClure Pass	4/26	26	10.1	19.5	9.1
Nast	4/27	2	0.7	5.0	2.0
North Lost Trail	4/26	18	6.9	15.8	8.3
Williams Fork River					
Glenmar Ranch	4/28	7	2.5	7.1	4.4
Jones Pass	4/30	41	13.3	17.3	15.8
Middle Fork	4/28	12	4.6	9.5	6.2
Willow Creek					
Granby	4/28	11	4.1	7.1	4.0
Willow Cr. Pass	4/28	28	10.5	13.3	11.0
Plateau Creek					
Mesa Lakes	4/27	49	18.0	24.1	15.8
Park Reservoir	4/28	66	26.7	33.0	24.0
Trickle Divide	4/28	73	30.3	36.6	26.9
YAMPA BASIN					
Elk River					
Elk River #2	4/29	35	14.6	20.7	15.4
Hahn's Peak	4/29	18	7.8	15.8	8.5
White River					
Burro Mountain	4/29	38	16.8	23.6	15.0
Rio Blanco	4/28	22	9.5	17.6	9.8
Yampa River					
Bear River	4/27	20	8.0	12.1	7.5
Columbine (B)	4/29	32	14.2	27.9	22.0
Crosho	4/27	30	10.8	17.3	---
Dry Lake	4/28	39	15.7	22.6	16.9
Lynx Pass (B)	4/29	20	8.1	14.7	8.4
Rabbit Ears	4/29	56	23.4	31.5	27.1
Tower	4/28	111	46.8	61.5	---
Yampa View	4/29	16	7.2	15.5	9.3

NOTE: NS - No Survey
(B) - On Adjacent Drainage

GPO 835-001

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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SOIL CONSERVATION SERVICE
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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

MAY 15, JUNE 1, 1976
and
SPECIAL MEASUREMENTS

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SURVEYOR ENROUTE TO THE MT. BALDY ARIZONA SNOW COURSE
SCS PHOTO AZ-5463

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

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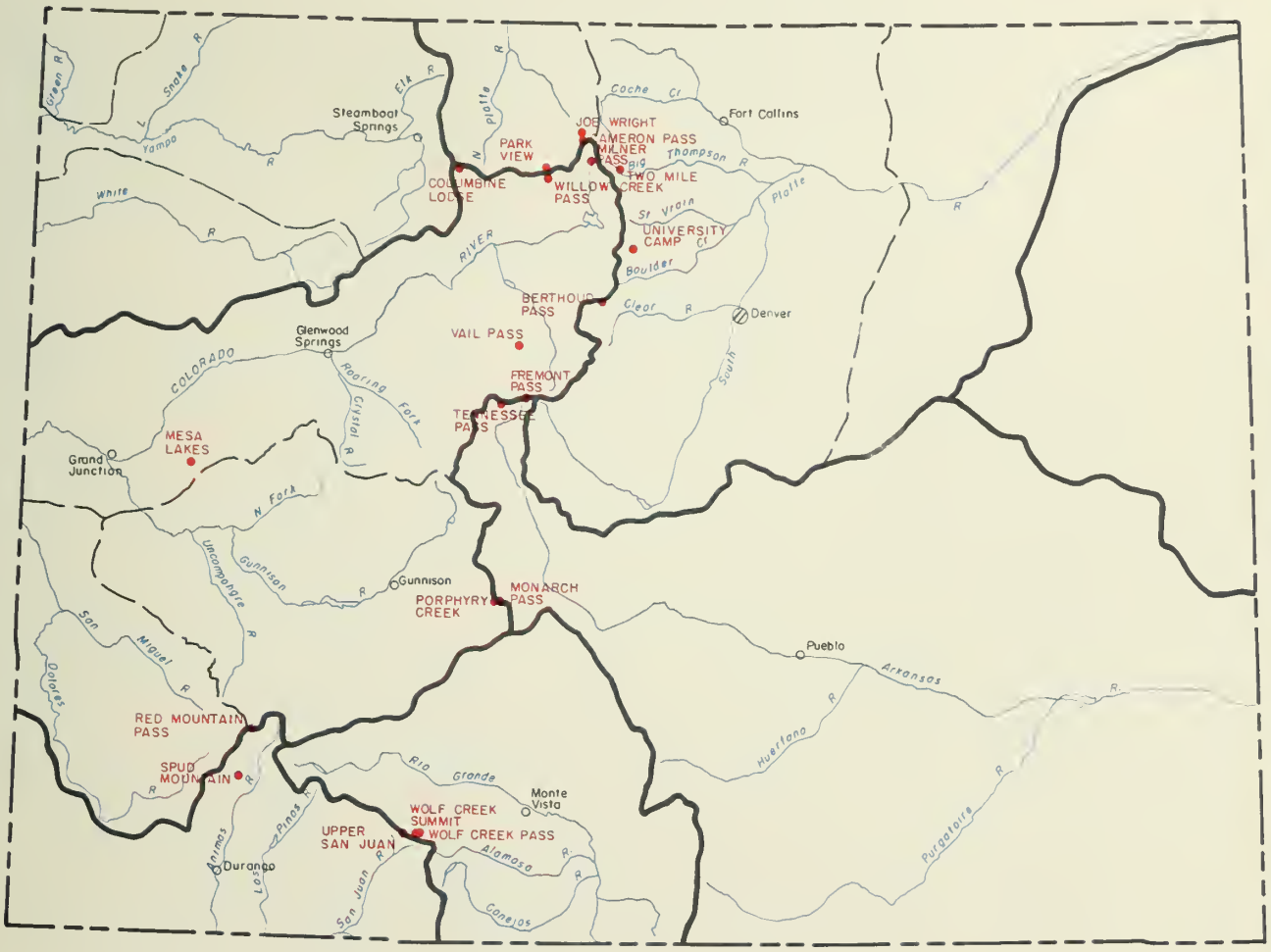
COLORADO SNOW COURSE LOCATIONS

FOR

SPECIAL MEASUREMENTS



EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1976

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
P.O. Box 17107
Denver, Colorado 80217

Report Prepared by
Jack N. Washichek and
Bernard A. Shafer
Soil Conservation Service

Snow Courses	Current Information			Past Record Water Content in Inches		
	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1 1958-72 Average	Jan. 1 Last Year	Feb. 1 1958-72 Average
*Arrow	12/29	23	4.3	---	---	---
*Berthoud Summit	12/30	25	6.6	7.8	7.5	11.4
Boulder Falls	12/29	17	3.5	---	3.0	7.1
Cameron Pass	12/29	33	10.7	---	10.7	16.5
*Cascade	12/30	24	7.2	---	5.0	8.0
*Columbine Lodge	12/30	29	7.3	8.6	10.5	14.3
Fremont Pass	12/30	32	7.4	6.0	5.9	9.8
*Joe Wright	12/29	34	8.8	---	10.3	---
McClure #1	12/30	24	5.8	---	6.0	11.1
*McClure #2	12/30	19	4.8	---	5.9	---
Mesa Lakes	12/29	25	5.7	7.4	6.4	10.5
*Mineral Creek	12/30	24	5.9	---	7.5	9.9
Ophir Loop	12/30	22	5.1	---	---	---
Porcupine	12/30	20	5.1	---	4.7	8.1
*Porphyry Creek	12/30	24	5.6	7.1	8.2	10.0
Rabbit Ears	12/30	34	8.5	---	12.8	16.1
Red Mountain	12/30	46	13.4	13.6	13.8	19.0
Spud Mountain	12/30	32	10.2	10.5	11.8	15.2
Tennessee Pass	12/30	19	3.4	4.3	3.6	6.5
*Tower	12/29	54	16.4	---	20.1	---
Two Mile	12/31	24	5.0	6.3	5.4	8.6
University Camp	12/29	22	5.0	6.8	5.6	10.9
*Upper San Juan	1/05	41	10.9	14.2	11.4	19.1
*Willow Creek	12/30	22	5.0	---	---	7.7
Wolf Creek Pass	1/05	39	9.4	13.5	9.4	17.4
Wolf Creek Summit	1/05	40	10.5	14.5	10.5	18.5
*Bateman (NM)	12/31	22	4.3	---	3.5	---
*Hopewell (NM)	12/30	25	5.8	---	---	---
La Cueva (NM)	12/29	7	1.5	---	2.4	---
*Red River #2 (NM)	12/29	19	5.0	---	---	---
Sandoval (NM)	12/30	7	1.2	---	2.0	3.5

*Indicates automatic sensors (SNOTEL Program).

EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1976

Water Supply Outlook

The only area in the state that has close to normal snow as of the January 1st readings is the Animas Drainage above Durango. Fremont Pass snow course is slightly above normal, but other courses in the vicinity are below.

None of the courses are seriously low.

Several good snow storms would bring the mountain snowpack up to normal.

A number of new courses have been added to this year's report. These are automatic sensors under the new Soil Conservation Service SNOTEL PROGRAM. The sensors have been installed, however, it will be another year before radio telemetry will be activated. These snow courses will continue to be reported on the first of each month.

MAY 15, 1976

WATER SUPPLY OUTLOOK

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
2490 West 26th Avenue
Denver, Colorado 80211

Report Prepared by
Jack N. Washichek and
Bernard A. Shafer
Soil Conservation Service

Snow Course	Current Information				Past Record Water Content (Inches)		
	Date of Survey	Snow Depth Inches	Water Content Inches	% of 1958-72 Average	May 15 1958-72 Average	May 15 Last Year	May 1 This Year
Berthoud Summit	5/14	42	16.2	79	20.4	21.0	18.9
Cameron Pass	5/13	68	31.5	108	29.2	33.1	37.0
Columbine Lodge	5/14	6	2.2	17	13.2	25.2	14.2
Fremont Pass	5/14	50	18.2	112	16.2	20.0	17.9
Joe Wright	5/14	55	23.2	83	28.0*	25.9	26.8
Mesa Lakes	5/13	28	11.0	122	9.0	20.4	18.0
Milner Pass	5/15	14	5.7	61	9.3*	11.3	10.5
Park View	5/13	4	1.4	70	2.0	7.4	6.4
Porphyry Creek	5/14	37	14.7	113	13.0	24.2	13.4
Rabbit Ears	5/14	47	20.6	74	27.9*	30.9	23.4
Red Mountain	5/14	70	34.0	122	27.8	49.0	35.1
Spud Mountain	5/14	49	22.9	128	17.9	39.9	25.6
Tennessee Pass	5/14	0	0.0	---	2.9	10.2	4.6
Two Mile	5/15	45	15.3	86	17.8	18.2	14.8
University Camp	5/15	34	13.4	80	16.7	18.7	16.9
Upper San Juan	5/17	38	18.8	123	15.3	37.6	31.5
Willow Creek Pass	5/13	16	5.5	93	5.9	12.4	10.5
Wolf Creek Pass	5/17	37	18.6	140	13.3	38.5	31.4
Wolf Creek Summit	5/17	83	37.5	129	29.0	45.1	35.2

*Less than 10 years of record.

Low elevation snow is almost gone in Colorado.

Forecasts of summer streamflow remains about the same as May 1st. The southern half of the state still has average or above snow, while the northern half is deficient.

Some of the snow-fed streams are just starting to flow. May temperatures will dictate whether we have an early or late runoff. Forecasts are based on normal climatic conditions for the remainder of the year.

JUNE 1, 1976

WATER SUPPLY OUTLOOK

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
2490 West 26th Avenue
Denver, Colorado 80211

Report Prepared by
Jack N. Washichek and
Bernard A. Shafer
Soil Conservation Service

Snow Courses	Current Information				Past Record Water Content (Inches)		
	Date of Survey	Snow Depth Inches	Water Content Inches	% of 1958-72 Average	June 1 1958-72 Average	June 1 Last Year	May 15 This Year
Berthoud Summit	5/27	28	11.2	93	12.1	17.3	16.2
Cameron Pass	5/28	54	26.2	120	21.9	30.4	31.5
Columbine Lodge	5/28	0	0.0	--	1.5	9.2	2.2
Fremont Pass	5/27	38	13.8	160	8.6	16.1	18.2
Joe Wright	5/28	40	18.0	--	---	25.0	23.2
Mesa Lakes	5/27	5	2.3	164	1.4	12.7	11.0
Milner Pass	5/31	0	0.0	--	---	3.5	5.7
Park View	5/28	0	0.0	--	0.1	0.8	1.4
Porphyry Creek	5/28	9	4.4	92	4.8	15.4	14.7
Rabbit Ears	5/28	22	10.1	--	---	21.6	20.6
Red Mountain	5/28	41	21.2	166	12.8	44.4	34.0
Spud Mountain	5/28	24	12.6	133	9.5	34.2	22.9
Tennessee Pass	5/28	0	0.0	--	0.0	0.8	0.0
Two Mile	5/31	31	11.6	82	14.2	17.5	15.3
University Camp	5/29	16	5.9	65	9.1	12.1	13.4
Upper San Juan	5/27	9	4.2	93	4.5	20.3	18.8
Willow Creek Pass	5/28	0	0.0	--	0.0	4.0	5.5
Wolf Creek Pass	5/27	10	4.8	137	3.5	21.9	18.6
Wolf Creek Summit	5/27	68	32.8	159	20.6	42.1	37.5

West slope streams have started flowing before the east slope streams, however, major runoff is yet to start. Cool temperatures have retarded snow-melt especially at the higher elevations. This is shown by high percentage of normals.

Spring rains have reduced demands on irrigation water, but the delayed melt will reduce runoff slightly over all of Colorado.

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

University of Illinois at Urbana-Champaign
DOC EX

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
FEB. 1, 1977

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW COURSE MEASUREMENTS BY A SURVEY TEAM IN UTAH'S WASATCH RANGE.
ORC-254-10

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, 6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Mantana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA-SCS-PORTLAND, OR 1976

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

ROBERT G. HALSTEAD

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

ALBERT W. HAMELSTROM

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN

DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
BERNARD A. SHAFER, Assistant Snow Survey Supervisor
JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditians in Loke County, Upper Arkansas, Fremont, Custer Caunty Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colarado, Turkey Creek, Pueblo, Bessemer, Olney Baone, Cheyenne, Upper Huerfana, Stonewall, Spanish Peaks, Purgatoire, Bronson Trinchera, Western Baca, Sautheastern Baco, Two Buttes, Bent, Timpas, Northeost Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Sail Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Masco Hooper, Mt. Blonca, Sanchez, and Culebra Soil Canservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes wo ter supply conditions in Upper Choma, East Rio Arriba, Taas, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, ond Edgewood Sail Conservatian Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

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Describes water supply conditions in Delta, Gunnison, Cimorron, Shavano, and Uncampohgre Soil Canservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

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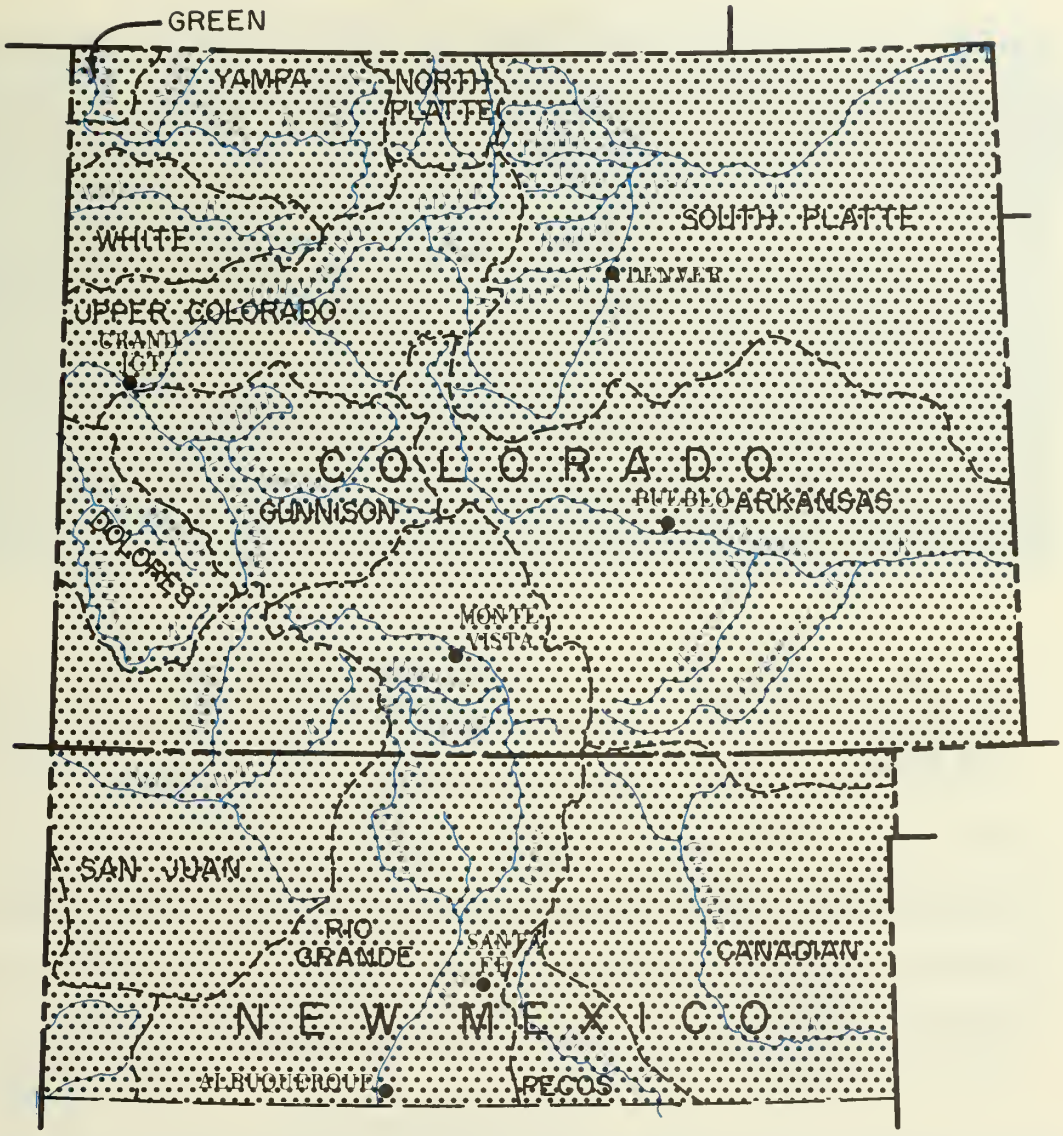
USDA-SCS-PORTLAND, OR 1976

WATER SUPPLY OUTLOOK

as of
FEBRUARY 1, 1977



GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
FEBRUARY 1, 1977

THE MOUNTAIN SNOWPACK IS VERY LOW IN ALL AREAS WITH THE EXCEPTION OF THE SANGRE DE CRISTO RANGE. POOR SOIL MOISTURE CONDITIONS IN IRRIGATED AREAS COUPLED WITH THE EXTREMELY LOW SNOWPACK WILL RESULT IN WATER SHORTAGES THIS SUMMER. EVEN IF ABOVE AVERAGE SNOWFALL WERE RECEIVED FROM NOW ON THE PROJECTED RUNOFF WOULD STILL BE BELOW NORMAL. ABOUT 60% OF THE SEASON'S SNOWFALL SHOULD BE ON THE GROUND BY THE FIRST OF FEBRUARY. WATER USERS SHOULD CONSIDER WHAT CONSERVATION MEASURES CAN BE IMPLEMENTED TO HELP THEIR SPECIFIC SITUATION.

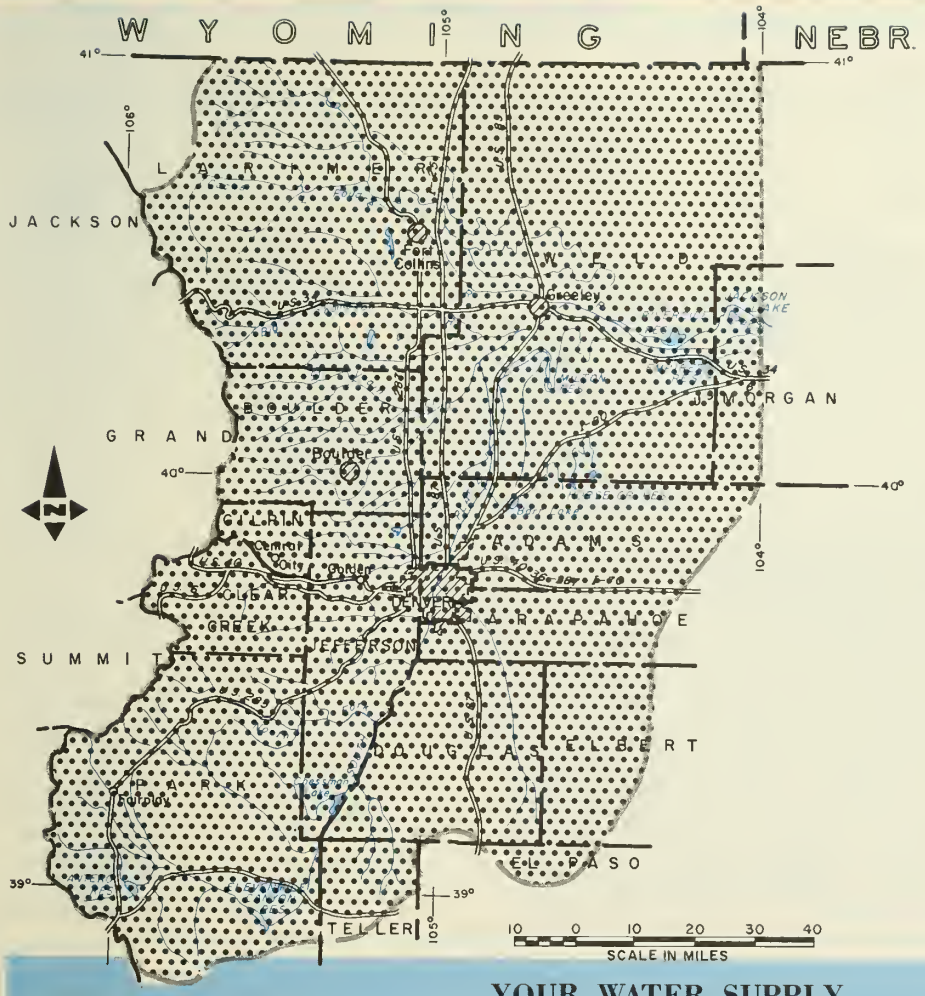
COLORADO -- SNOWFALL IN THE MOUNTAINS HAS BEEN EXTREMELY DEFICIENT SO FAR THIS WINTER. IT IS PRESENTLY 50 TO 75% BELOW NORMAL. BELOW NORMAL SOIL MOISTURE CONDITIONS FURTHER COMPOUND WATER PROBLEMS. PROJECTED STREAMFLOWS ASSUMING NORMAL PRECIPITATION FOR THE REMAINDER OF THE SEASON WILL BE 40 TO 60% BELOW AVERAGE. THE ONLY BRIGHT NOTE IS CARRYOVER RESERVOIR STORAGE WHICH IS NEAR AVERAGE IN MOST AREAS.

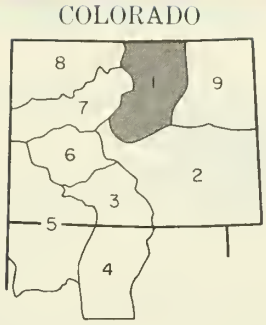
NEW MEXICO -- SNOWFALL HAS BEEN NEAR AVERAGE IN THE SANGRE DE CRISTO RANGE BUT HAS BEEN MUCH BELOW ON THE HEADWATERS OF THE RIO GRANDE WHERE SNOWPACK IS 75% BELOW NORMAL. ASSUMING NORMAL PRECIPITATION FOR THE REMAINDER OF THE SEASON THE RIO GRANDE SHOULD FLOW LESS THAN 50% OF NORMAL. WATER SHORTAGES CAN BE EXPECTED ON MOST STREAMS. SOIL MOISTURE VARIES FROM POOR TO GOOD. CARRYOVER RESERVOIR STORAGE IS SLIGHTLY BELOW NORMAL.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

FEBRUARY 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO





LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

CURRENT SNOWPACK ON THESE DRAINAGES IS VERY LOW, AVERAGING ABOUT 40% OF NORMAL. SUMMER STREAMFLOW WILL BE MUCH BELOW AVERAGE. CARRYOVER STORAGE IS NEAR NORMAL AND WILL BE AN EXCELLENT SUPPLEMENT. SOIL MOISTURE IS DEFICIENT. ABOUT 60% OF THE SNOW SEASON IS PAST. THREE MORE MONTHS REMAIN TO INCREASE THE SNOWPACK.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

RODNEY M. ALT—AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Big Thompson River at Drake (1)	64	60	107
Boulder Creek at Orodell	29	59	49
Cache La Poudre River at Canyon Mouth (2)	150	61	247
Clear Creek at Golden (3)	70	55	127
St. Vrain Creek at Lyons (4)	44	59	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Poor	Poor
Coal Creek	Poor	Poor
North Fork of South Platte	Poor	Poor
North Fork of Cache La Poudre	Poor	Poor
Ralston Creek	Poor	Poor
Rock Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Big Thompson	5	30	27
Boulder	3	64	47
Cache La Poudre	6	35	34
Clear Creek	6	69	58
Saint Vrain	2	42	36
South Platte	2	35	37

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Antero	33	15	16	14
Barr Lake	32	25	25	21
Black Hollow	8	4	4	4
Boyd Lake	44	34	39	37
Cache La Poudre	10	0	4	8
Carter Lake	109	64	92	77
Chambers Lake	9	2	2	3
Cheesman	79	32	49	56
Cobb Lake	34	5	15	15
Eleven Mile	98	90	98	87
Fossil Creek	12	6	4	7
Gross	43	22	24	29
Halligan	6	2	2	3
Horsetooth	144	71	92	86
Lake Loveland	14	9	10	9
Lone Tree	9	3	4	6
Mariano	5	5	5	5
Marshall	10	3	4	4
Marston	18	16	13	14
Milton	24	15	16	13
Standley	42	27	29	15
Terry	8	6	6	5
Union	13	13	11	10
Windsor	19	8	12	10

* 1958-1972 period.

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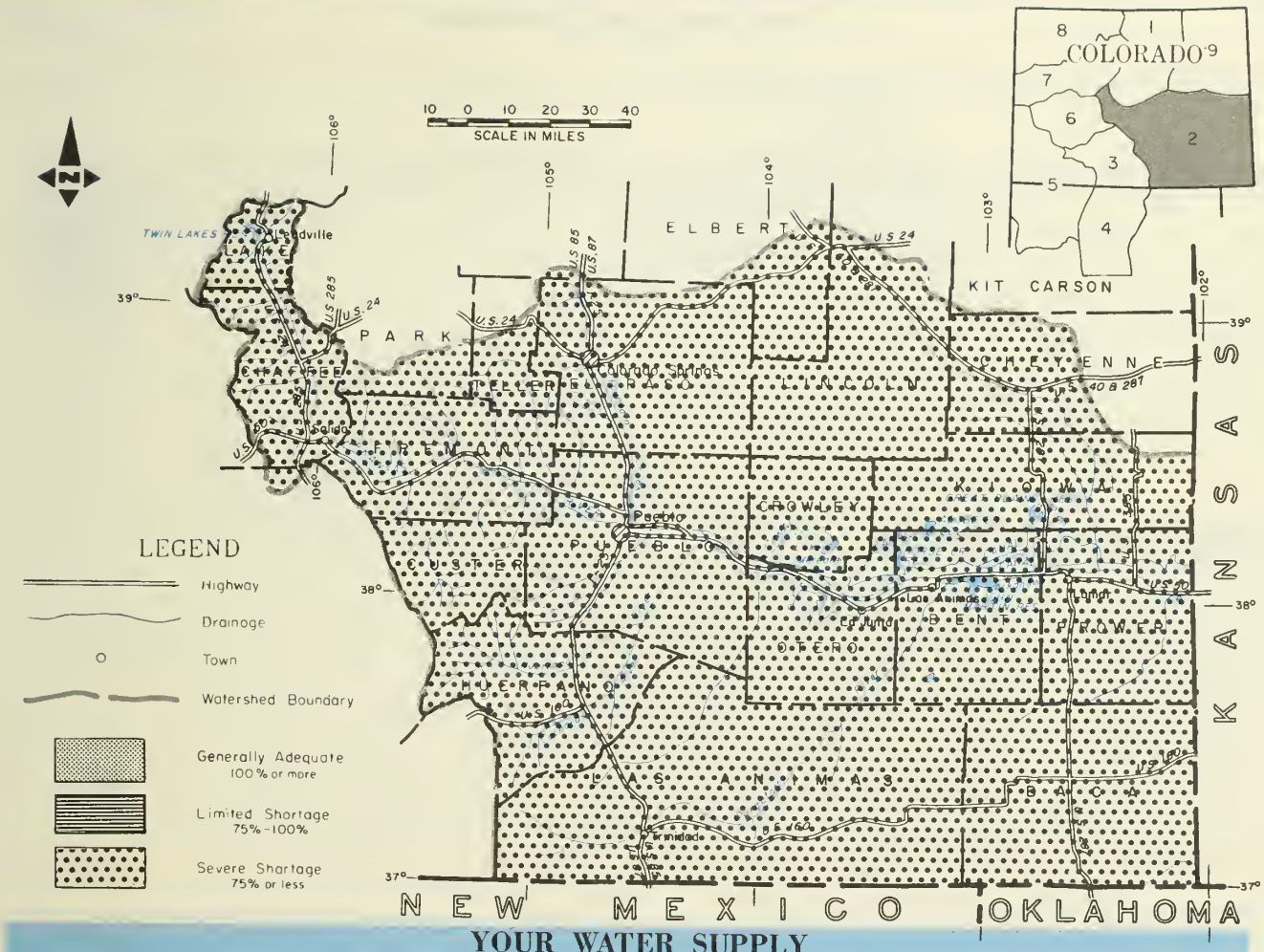
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

FEBRUARY 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE MOUNTAIN SNOWPACK IS VERY POOR ON THE HEADWATERS OF THE ARKANSAS. THE EAST SLOPES OF THE SANGRE DE CRISTO RANGE ARE IN BETTER SHAPE BUT STILL BELOW AVERAGE. SOILS ARE VERY DRY AND CARRYOVER RESERVOIR STORAGE IS EXTREMELY POOR. WITH THESE CONDITIONS PREVAILING THE OUTLOOK FOR WATER SUPPLIES IS POOR. EVEN WITH ABOVE AVERAGE SNOWFALL FOR THE REMAINDER OF THE SEASON WATER SUPPLIES WILL BE DEFICIENT FOR THE IRRIGATION SESON.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

D. W. GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.)

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Arkansas River near Pueblo (1)	145	50	290
Arkansas River at Salida (1)	165	53	313
Cucharas River near La Veta	7	70	10
Huerfano River near Redwing	8	53	15
Purgatoire River at Trinidad	23	61	38

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Apishapa River	Poor	Poor
Fountain Creek	Poor	Poor
Grape Creek	Poor	Poor
Hardscrabble Creek	Poor	Poor
Monument Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Arkansas	7	37	35
Cucharas	2	101	89
Purgatoire	1	63	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Adobe	62	0	0	17
Clear Creek	11	6	5	8
Cucharas	40	0	0	3
Great Plains	150	0	0	49
Horse Creek	27	8	4	6
John Martin	354	12	7	85
Meredith	42	0	0	10
Model	15	0	1	3
Turquoise	121	32	52	16
Twin Lakes	58	7	18	26

* 1958-1972 period.

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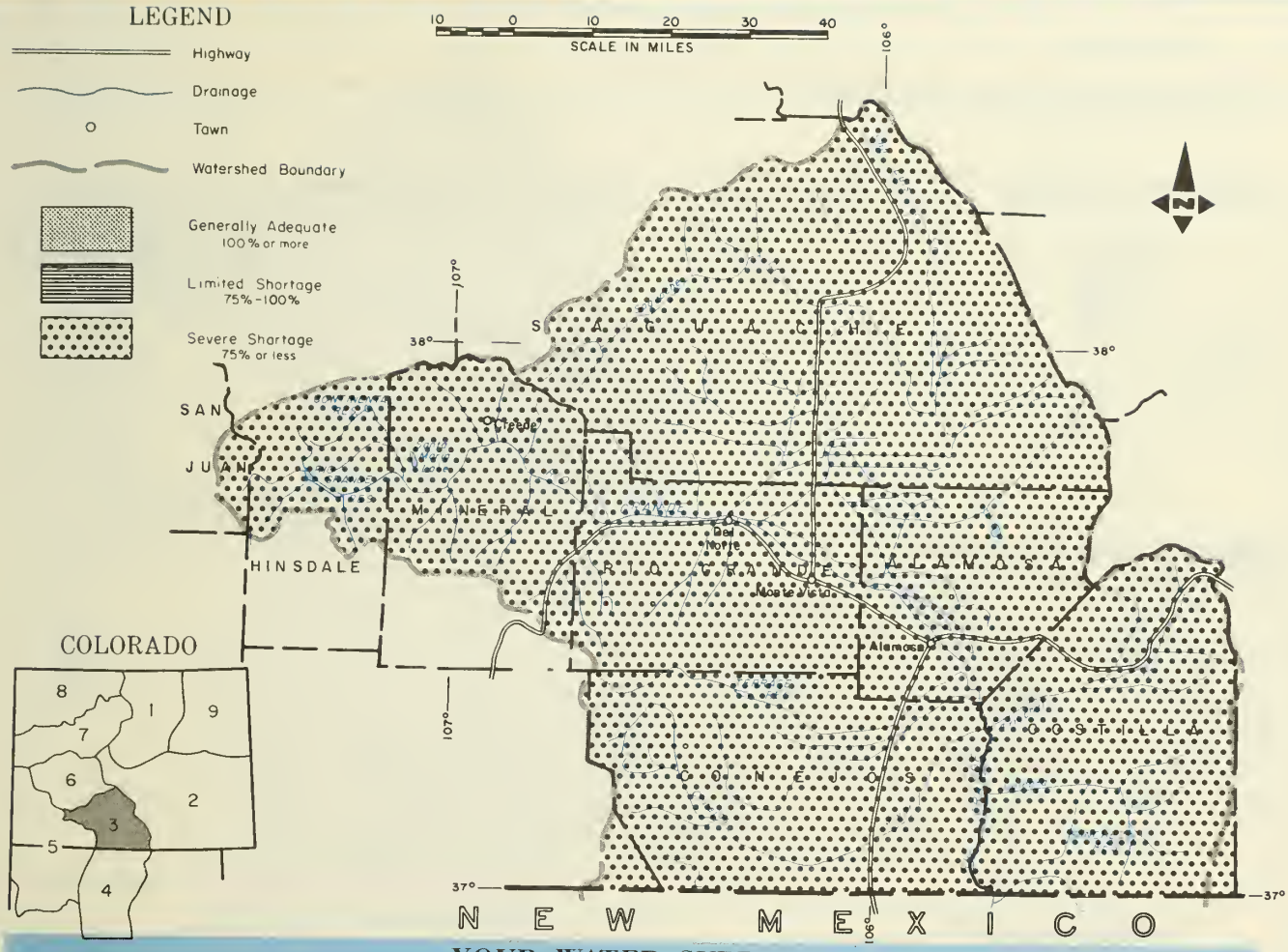
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

FEBRUARY 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK IN THE RIO GRANDE DRAINAGE IS MUCH BELOW NORMAL EXCEPT FOR THE EAST SIDE OF THE VALLEY WHERE SNOW IS EVEN ABOVE NORMAL. WATER SUPPLIES WILL STILL BE MUCH BELOW NORMAL THIS SUMMER. WATER USERS ON DIRECT FLOW RIGHTS WILL BE ESPECIALLY HARD HIT. CARRYOVER STORAGE IS ABOUT 75% OF NORMAL IN VALLEY RESERVOIRS. SOILS ARE DRY.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G HALSTEAD—STATE CONSERVATIONIST
DENVER COLORADO

D W GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	* Average
Alamosa Creek above Terrace Reservoir	30	48	62
Conejos River near Mogote (1)	100	54	184
Culebra Creek at San Luis (2)	11	65	17
Rio Grande at 30 Mile Bridge (3)	74	61	121
Rio Grande near Del Norte (3)	275	59	467
South Fork of Rio Grande at South Fork	60	52	115

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Poor	Poor
Sangre de Cristo Cr.	Poor	Poor
Trinchera Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Alamosa	2	22	19
Conejos	2	51	32
Culebra	2	100	77
Rio Grande	10	26	25

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Continental	27	16	4	5
Platoro	60	14	–	9
Rio Grande	46	3	16	19
Sanchez	103	4	6	13
Santa Maria	45	7	9	6
Terrace	18	5	8	5

* 1958-1972 period.

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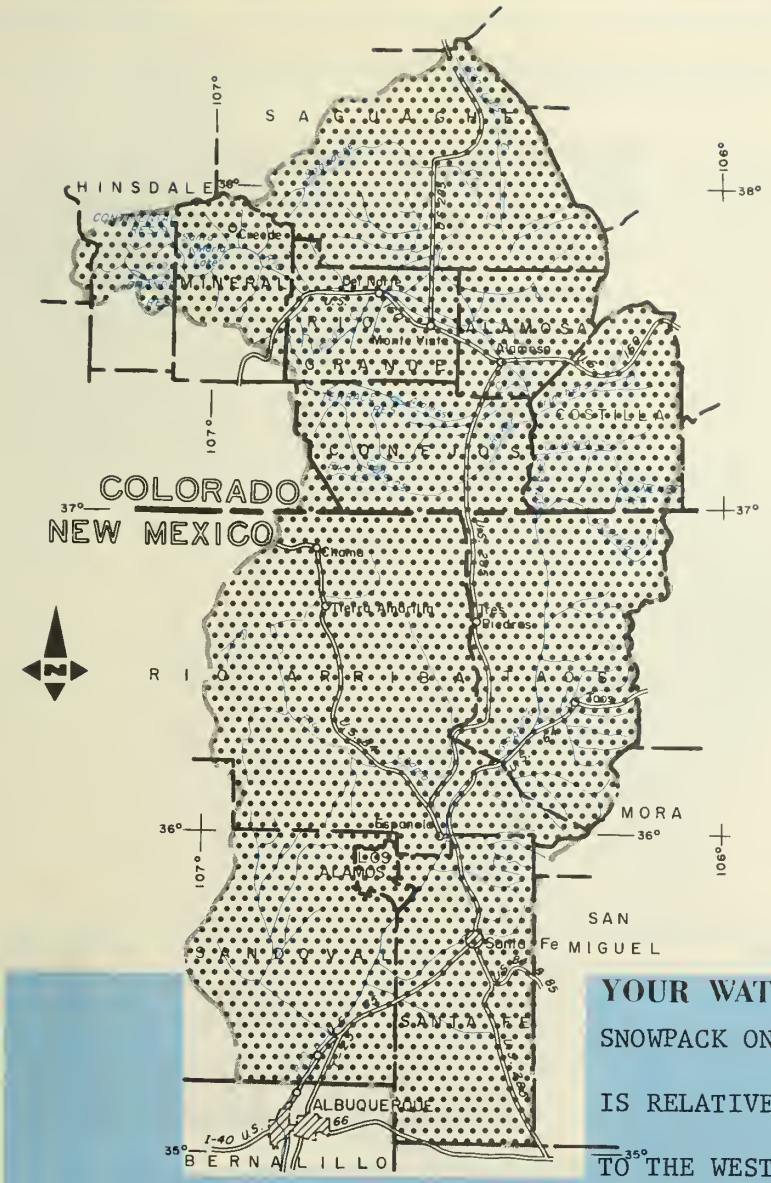
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

FEBRUARY 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100 % or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

SNOWPACK ON THE SANGRE DE CRISTO RANGE IS RELATIVELY GOOD AND ON THE SAN JUANS TO THE WEST VERY POOR. SNOW IN THE RIO GRANDE BASIN IN COLORADO IS NEAR THE MINIMUM OF RECORD. STREAMS ARE FORECASTED TO FLOW MUCH BELOW NORMAL THIS SUMMER EXCEPT THOSE ORIGINATING IN THE SANGRE DE CRISTOS. SOIL MOISTURE IS REPORTED AS POOR TO GOOD.

This report prepared by

JACK N WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

A W HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

JAMES E TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) March—July

FORECAST POINT	FORE-CAST	% of Average	Average *
Costilla Creek at Costilla (1)	11	58	19
Jemez River near Jemez	16	55	29
Pecos River at Pecos	34	83	41
Red River at Mouth near Questa	22	76	29
Rio Chama at El Vado	90	47	190
Rio Grande at Otowi (2)	235	45	526
Rio Grande at San Marcial (2)	160	45	355
Rio Hondo near Valdez	8	57	14
Santa Cruz River at Cundiyo	7	58	12

(1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Poor	Poor
Mora River	Poor	Poor
Nambe Creek	Poor	Poor
Rio Ojo Caliante	Poor	Poor
Rio Pueblo de Taos	Poor	Poor
Santa Fe Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Pecos	1	93	112
Red River	2	54	80
Rio Chama	2	53	50
Rio Grande, NM	8	86	75
Rio Hondo	1	65	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average *
Alamogordo	111	20	35	80
Avalon	5	4	3	3
Caballo	344	133	69	50
Conchas	273	83	82	185
El Vado	195	110	122	2
Elephant Butte	2195	318	684	442
McMillan	34	3	5	17

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
FEBRUARY 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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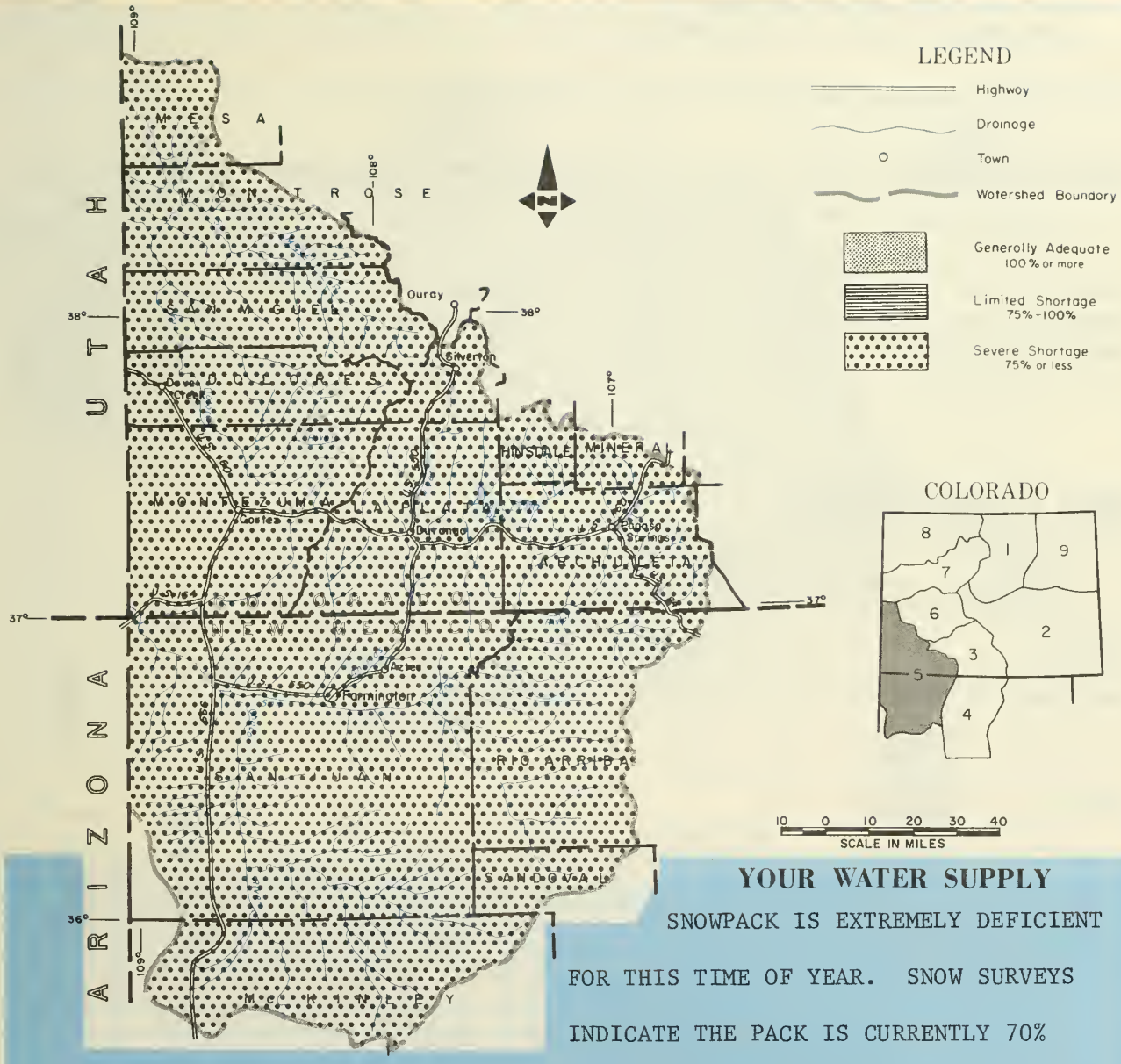

YOUR WATER SUPPLY

SNOWPACK IS EXTREMELY DEFICIENT FOR THIS TIME OF YEAR. SNOW SURVEYS INDICATE THE PACK IS CURRENTLY 70% BELOW AVERAGE. MANY COURSES RECORDED THE MINIMUM WATER EVER MEASURED IN THE LAST FORTY YEARS. SOIL MOISTURE IN IRRIGATED AREAS IS POOR. PROJECTED STREAMFLOWS WILL BE WELL BELOW AVERAGE.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

A W HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D W GILLASPIE—AREA CONSERVATIONIST
ALAMOSA COLORADO

JAMES E TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Animas River at Durango	235	56	423
Dolores River at Dolores	115	50	232
La Plata River at Hesperus	12	50	24
Los Pinos River at Bayfield (1)	115	58	198
Mancos River near Towac (3)	7	50	14
Inflow to Navajo River (1 & 2)	300	50	597
Piedra Creek at Arboles	88	48	185
San Juan River at Carracas	160	45	354
San Miguel River at Placerville	68	52	130

(1) Observed flow plus change in storage in Vallicito Reservoir. (2) April – July (3) March–July

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida River	Poor	Poor
Hermosa Creek	Poor	Poor
West Dolores River	Poor	Poor
Williams Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Animas	5	31	27
Dolores	5	31	27
San Juan	5	45	31

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Groundhog	22	6	9	9
Jackson Gulch	10	17	6	4
Lemon	40	17	20	19
Navajo	1696	1145	1130	1237
Vallecito	126	47	53	53

* 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

FEBRUARY 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE MOUNTAIN SNOWPACK IS 60 TO 70% BELOW NORMAL FOR THIS TIME OF YEAR. MANY SNOW COURSES RECORDED THE MINIMUM OF RECORD FOR THIS DATE. APPROXIMATELY 60% OF THE SNOW SEASON IS NOW PASSED. THE OUTLOOK FOR WATER SUPPLIES FOR THE FORTHCOMING SEASON ARE VERY POOR. SOILS REMAIN DRY. EVEN WITH MUCH ABOVE AVERAGE SNOWFALL FOR THE REMAINDER OF THE SNOW SEASON IT IS UNLIKELY RUNOFF WILL APPROACH AVERAGE. CARRYOVER RESERVOIR STORAGE IS NEAR AVERAGE.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Gunnison River inflow to Blue Mesa Reservoir (1)	400	51	792
Gunnison River near Grand Junction (2)	550	46	1184
North Fork of Gunnison (3)	130	49	263
Surface Creek near Cedaredge	10	65	16
Uncompahgre River at Colona	64	48	134

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Ohio Creek	Poor	Poor
Slate River	Poor	Poor
Taylor River	Poor	Poor
Tomichi Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Gunnison	10	39	32
Surface Creek	3	36	26
Uncompahgre	3	40	39

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average *
Blue Mesa	830	415	435	491
Morrow Point	121	115	115	100
Taylor	106	59	51	63

* 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

FEBRUARY 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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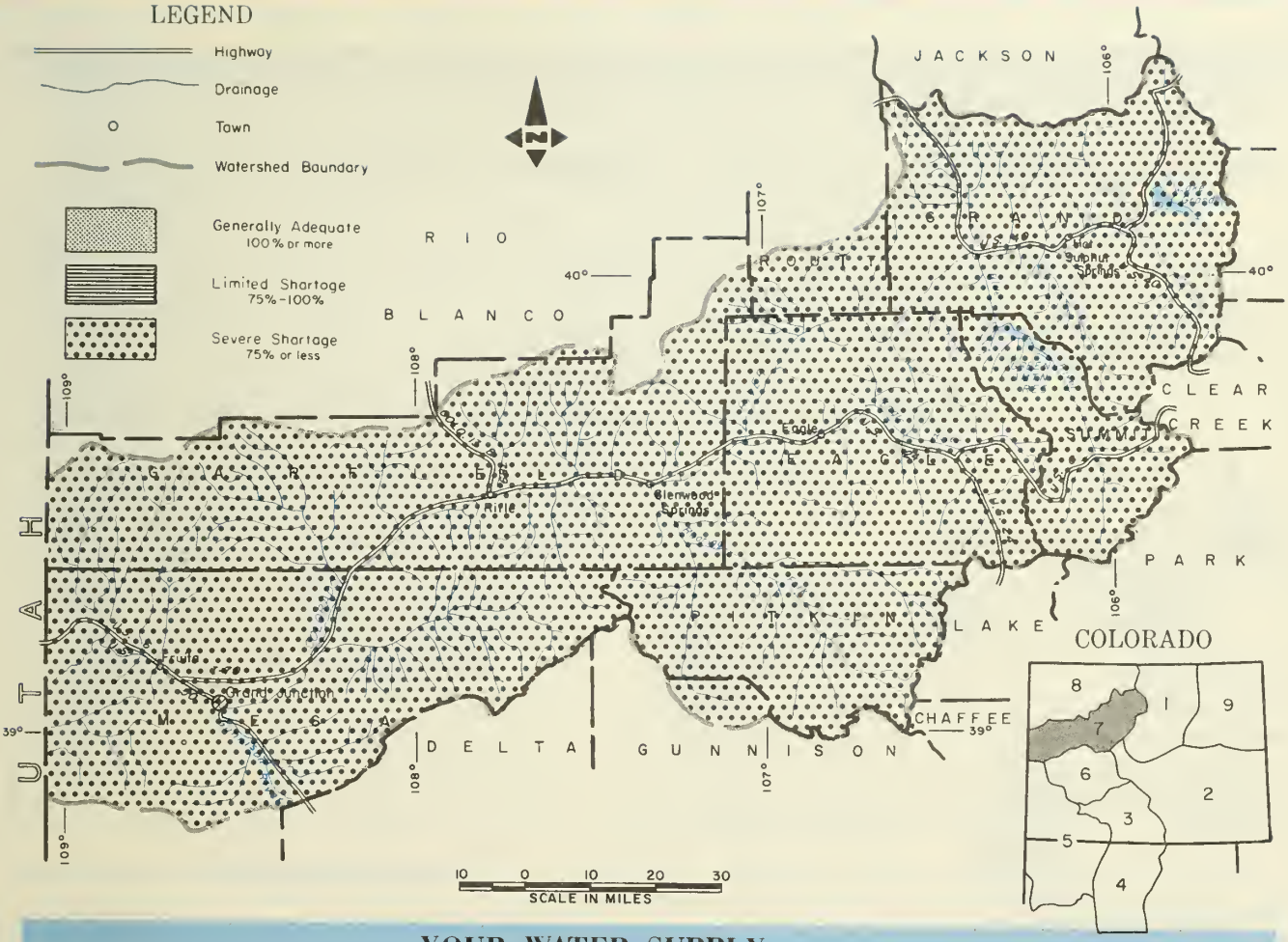

YOUR WATER SUPPLY

THE MOUNTAIN SNOWPACK IS 60 TO 70% BELOW NORMAL FOR THIS TIME OF YEAR. MANY SNOW COURSES MEASURED THE MINIMUM EVER RECORDED AT THIS TIME IN THE LAST 40 YEARS. PROJECTED STREAMFLOW IS MUCH BELOW AVERAGE AND WATER SHORTAGES WILL BE EXPERIENCED IF PRESENT WEATHER PATTERNS PERSIST. SOIL MOISTURE IN IRRIGATED AREAS IS BELOW NORMAL. CARRYOVER RESERVOIR STORAGE IS NEAR NORMAL AND SHOULD HELP ALLEVIATE SOME WATER SHORTAGES.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Blue River inflow to Dillon Reservoir	78	46	169
Blue River inflow to Green Mountain Reservoir (1)	145	49	297
Colorado River near Cameo (6)	1185	50	2370
Colorado River near Dotsero (3)	690	48	1434
Colorado River inflow to Granby Reservoir (2)	135	60	228
Roaring Fork at Glenwood Springs (4)	400	56	713
Williams Fork near Parshall (5)	30	48	63
Willow Creek inflow to Willow Creek Reservoir	22	47	47

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Poor	Poor
Eagle River	Poor	Poor
Gypsum Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Blue River	6	42	43
Colorado	17	43	40
Plateau	3	35	26
Roaring Fork	7	37	33
Williams Fork	3	46	43
Willow	2	43	40

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Dillon	254	215	229	234
Granby	466	216	319	255
Green Mountain	139	76	85	77
Homestake	43	23	0	20
Ruedi	101	69	68	70
Vega	32	6	12	10
Williams Fork	97	52	52	34
Willow Creek	9	6	7	6

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
FEBRUARY 1, 1977

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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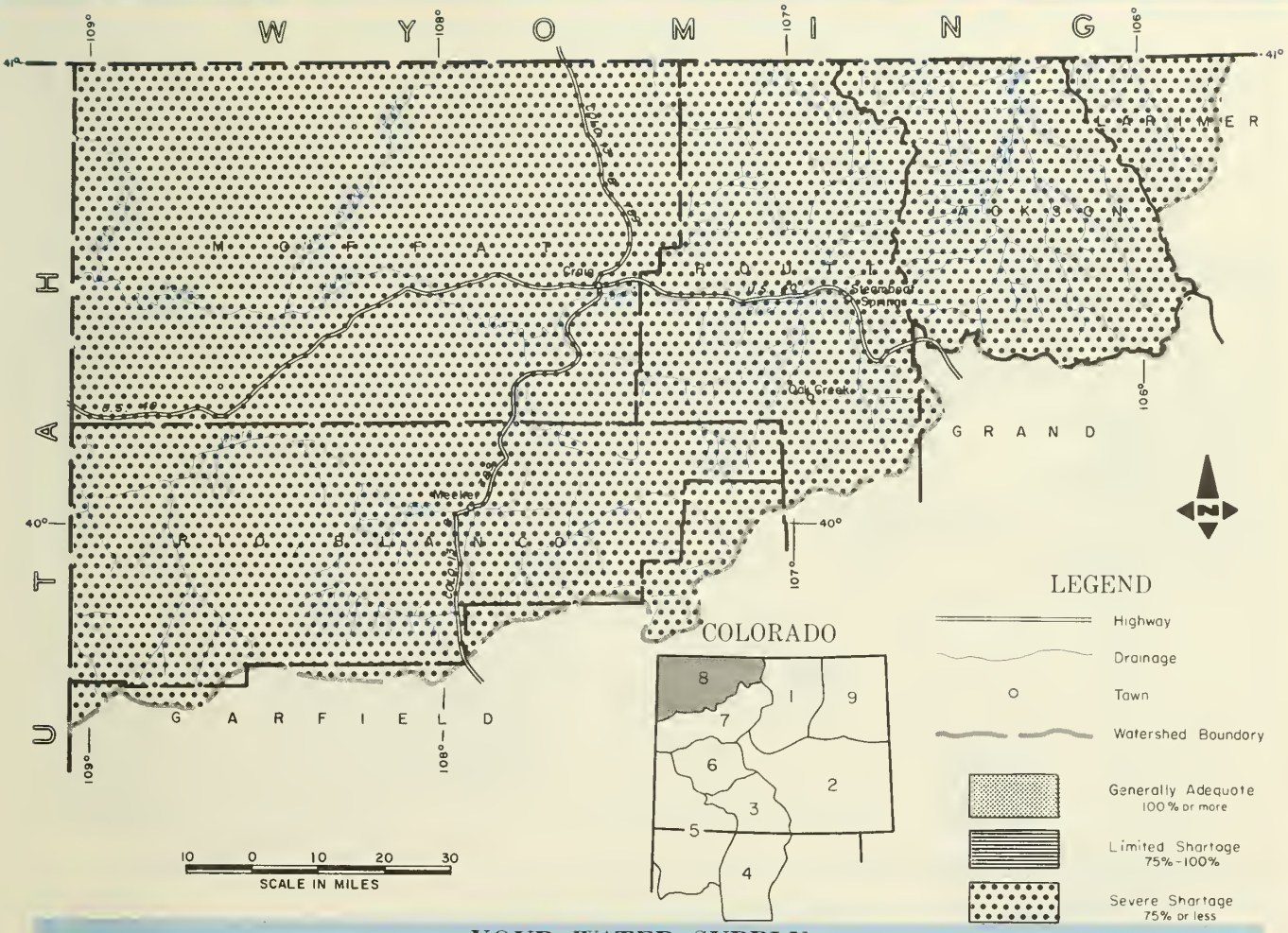

YOUR WATER SUPPLY

THE SNOWPACK IN NORTHWESTERN COLORADO IS MUCH BELOW NORMAL. IN SOME CASES INDIVIDUAL SNOW COURSES INDICATE SNOWFALL IS APPROACHING OR BELOW MINIMUM OF RECORD. SUMMER STREAMFLOW WILL BE CONSIDERABLY BELOW NORMAL. SMALL STREAMS WILL HAVE LIMITED FLOWS. SOILS IN THE IRRIGATED AREAS ARE GENERALLY DRY AND HAVE LITTLE SNOW COVER.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Elk River at Clark	125	63	198
Laramie River near Woods	65	51	127
Little Snake River at Lily	150	46	324
North Platte River at Northgate	125	52	240
White River near Meeker	165	56	295
Yampa River near Maybell	450	50	905
Yampa River at Steamboat Springs	130	47	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Poor	Poor
Hunt Creek	Poor	Poor
Illinois River	Poor	Poor
Michigan River	Poor	Poor
Oak Creek	Poor	Poor
Trout Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Elk	2	33	27
Laramie	2	32	25
North Platte	5	52	47
White	2	55	41
Yampa	5	49	42

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

FEBRUARY 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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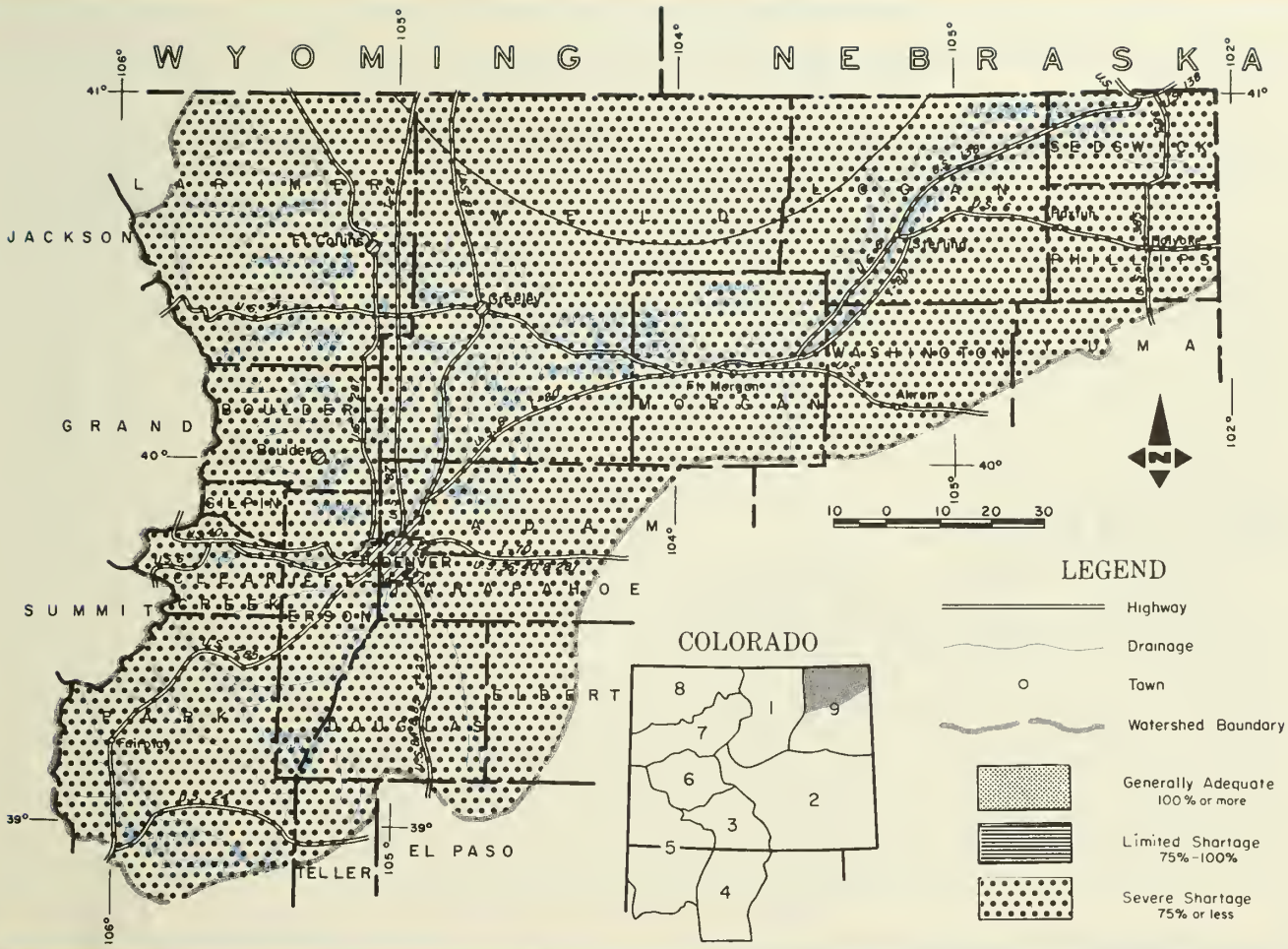

YOUR WATER SUPPLY

THE MOUNTAIN SNOWPACK IS 40 TO 70% BELOW NORMAL FOR THIS TIME OF YEAR. MANY SNOW COURSES MEASURED THE MINIMUM EVER RECORDED IN THE PAST 40 YEARS. FORECAST WATER SUPPLIES WILL BE MUCH BELOW NORMAL EVEN IF WE RECEIVE ABOVE AVERAGE SNOWFALL FOR THE REMAINDER OF THE SEASON. SOIL MOISTURE IS BELOW NORMAL. CARRYOVER STORAGE IS NEAR NORMAL WHICH IS THE ONLY OPTIMISTIC NOTE FOR THE FUTURE.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M. ALT—AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	64	60	107
Boulder Creek at Orodell	29	59	49
Cache La Poudre River at Canyon Mouth (2)	150	61	247
Clear Creek at Golden (3)	70	55	127
Saint Vrain Creek at Lyons (4)	44	59	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigotion diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
South Platte from Greeley to Fort Morgan	Poor	Poor
South Platte from Fort Morgan to Sterling	Poor	Poor
South Platte below Sterling	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average*
Big Thompson	5	30	27
Boulder	3	64	47
Cache La Poudre	6	35	34
Clear Creek	6	69	58
Saint Vrain	2	42	36
South Platte	2	35	37

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Carter	109	64	92	77
Cheesman	79	32	49	56
Eleven Mile	98	90	98	87
Empire	38	26	21	26
Horsetooth	144	71	92	86
Jackson	35	30	20	28
Julesburg	28	19	20	20
Point of Rocks	70	50	58	53
Prewitt	33	23	25	16
Riverside	58	42	41	45

* 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of FEBRUARY 1, 1977

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVG 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	1/27	15	2.6	8.2	10.4
McIntyre	NS	--	---	---	---
Roach	1/28	24	5.2	12.5	---
North Platte River					
Cameron Pass	1/28	26	8.6	16.0	16.5
Columbine Lodge	1/28	29	6.8	12.4	14.3
Northgate	1/28	9	1.8	3.2	3.8
Park View	1/27	14	2.2	5.4	5.8
Willow Cr. Pass (B)	1/27	16	3.2	6.4	7.7
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	1/28	11	2.8	3.1	5.1
Boulder Falls	1/27	18	3.7	6.0	7.1
University Camp	1/27	20	4.4	7.9	10.9
Big Thompson River					
Deer Ridge	1/28	0	0.0	3.2	2.9
Hidden Valley	1/28	11	1.9	5.2	6.4
Lake Irene (B)	1/26	25	4.9	11.4	13.8
Long's Peak	1/28	7	1.2	5.4	6.0
Two Mile	1/28	11	2.1	8.0	8.6
Cache La Poudre					
Bennett Creek	1/29	6	0.7	4.0	---
Big South	1/28	2	0.2	0.8	1.4
Cameron Pass	1/28	26	8.6	16.0	16.5
Chambers Lake	1/28	7	1.1	6.9	5.6
Deadman Hill	1/27	15	2.6	8.2	10.4
Hourglass Lake	1/29	6	0.7	4.2	---
Joe Wright	1/28	34	9.1	12.6	---
Lost Lake	1/27	12	2.2	7.6	7.7
Red Feather	1/27	6	0.8	4.2	4.0
Clear Creek					
Baltimore (B)	1/28	11	2.8	3.1	5.1
Berthoud Falls	1/28	17	4.0	6.2	8.3
Empire	1/28	9	2.2	3.2	4.5
Grizzly Peak (B)	1/26	27	5.8	10.4	10.6
Loveland Lift	1/26	34	9.1	10.6	12.2
Loveland Pass	1/26	22	5.0	8.2	9.0
St. Vrain River					
Copeland Lake	1/29	5	0.8	2.4	2.8
Ward	1/27	8	1.5	3.0	3.6
Wild Basin	NS	-	---	---	7.2
South Platte River					
Como	1/27	3	0.6	5.0	---
Geneva Park	1/28	1	0.1	4.1	---
Horseshoe Mt.	1/26	11	1.4	6.6	---
Hoosier Pass	1/28	14	3.0	8.2	8.0
Jefferson Creek	1/27	11	2.2	6.8	5.9
Mosquito	1/27	12	2.1	6.9	---
Trout Creek Pass	1/26	2	0.3	3.2	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	1/26	18	4.7	4.9	---
Cooper Hill (B)				8.0	6.9
East Fork	1/27	14	2.6	6.5	6.0
Four Mile Park	1/29	6	0.5	3.5	3.9
Fremont Pass	1/27	22	4.0	11.0	9.8
Garfield	1/28	16	2.8	8.2	8.5
Hermit Lake	1/27	13	2.8	4.5	---
Monarch Pass	1/28	20	4.0	7.8	10.3
Tennessee Pass	1/29	15	1.8	5.4	6.5
Twin Lakes Tunnel	1/21	6	0.9	5.3	6.0
Westcliffe	1/27	16	2.8	4.5	---

NOTE: NS - No Survey
(B) - On Adjacent Drainage

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVG 58-72
Cucharas River					
Apishapa	1/28	17	4.2	5.5	4.5
Cucharas Creek	1/28	21	4.5	6.3	---
La Veta Pass (B)	1/28	20	4.8	3.4	5.6
Purgatoire River					
Bourbon	1/27	18	2.9	4.6	---
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	1/25	7	0.8	4.7	3.5
Summitville	1/27	16	2.2	9.0	11.9
Conejos River					
Cumbres	1/27	23	5.1	7.9	13.1
La Manga	1/27	20	3.6	9.2	---
Platoro	1/31	15	3.2	8.5	12.5
River Springs	NS	--	---	---	4.3
Culebra River					
Brown Cabin	1/27	16	2.4	---	---
Cottonwood (B)	1/27	15	2.3	---	---
Culebra	1/26	24	3.8	5.3	5.6
La Veta Pass (B)	1/28	20	4.8	3.4	5.6
Trinchera (B)	1/28	18	3.2	---	---
Rio Grande					
Cochetopa Pass	1/26	6	1.5	4.0	3.6
Grayback	1/27	13	2.0	8.6	---
Hiway	1/26	17	3.8	9.8	15.6
Lake Humphrey	1/27	9	1.2	5.1	4.8
Love Lake	1/28	8	1.0	5.2	---
Pass Creek	1/26	12	2.0	6.4	8.2
Pool Table	1/28	11	1.0	3.2	5.2
Porcupine	1/31	8	1.3	6.0	8.1
Santa Maria	1/31	2	0.1	2.3	3.3
Upper Rio Grande	1/31	8	1.4	4.8	5.8
Wolf Creek Pass	1/26	22	5.3	11.2	17.4
Wolf Cr. Summit (B)	1/26	21	4.8	11.6	18.5
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela	1/27	14	2.8	3.0	2.5
Rio Chama					
Bateman	1/27	21	3.5	5.7	---
Chama Divide	1/31	11	1.5	3.0	2.9
Chamita	1/31	16	2.7	4.9	5.5
Rio Grande					
Alamitos	2/01	13	2.7	3.3	---
Big Tesuque	1/28	11	2.2	3.6	4.0
Cordova	NS	--	---	---	6.2
Elk Cabin	1/27	8	1.0	2.3	2.7
Hopewell	1/28	23	3.6	10.0	---
La Cueva	1/27	15	3.0	2.7	---
Palo	1/25	18	3.3	6.9	---
Payrole	1/28	14	3.4	4.3	6.1
Quemazon	1/31	16	3.5	2.9	6.1
Rio En Medio	1/28	18	3.7	5.1	6.0
Sandoval	2/01	13	2.6	1.0	3.5
Senorita Divide	1/27	19	3.9	3.9	---
Taos Canyon	1/24	17	4.0	6.8	2.7
Tres Ritos	2/01	12	3.7	4.0	3.3
Rio Hondo					
Taos Powderhorn	1/26	41	9.7	15.0	---
Red River					
Hematite Park (B)	1/25	14	2.6	4.6	2.9
Red River	1/25	11	2.7	5.2	3.7
Red River #2	1/25	18	3.5	6.3	---

APPENDIX I

SNOW COURSE MEASUREMENTS as of FEBRUARY 1, 1977

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	1/27	11	2.0	7.4	8.0
Lemon	1/28	10	2.2	5.4	---
Mineral Creek	1/27	17	2.6	8.0	9.9
Molas Lake	1/27	12	2.1	7.0	8.7
Purgatory	1/27	15	1.9	10.3	---
Red Mt. Pass (B)	1/27	32	5.9	16.7	19.0
Silverton Sub-Sta.	NS	--	--	6.2	5.6
Spud Mountain	1/27	15	3.6	13.0	15.2
Dolores River					
Lizard Head	1/28	10	2.0	7.0	10.4
Lone Cone	1/28	16	3.0	12.2	11.8
Ophir Loop	1/27	21	4.1	7.0	---
Rico	1/28	9	1.2	3.8	5.6
Telluride	1/27	15	2.2	5.2	4.7
Trout Lake	1/27	17	2.8	7.3	8.1
San Juan River					
Chama Divide (B)	1/31	11	1.5	3.0	2.9
Chamita (B)	1/31	16	2.7	4.9	5.5
Upper San Juan	1/26	26	5.4	12.8	19.1
Wolf Cr. Pass (B)	1/2	22	5.3	11.2	17.4
Wolf Cr. Summit	1/26	21	4.8	11.6	18.5
GUNNISON BASIN					
Gunnison River					
Alexander Lake	1/28	19	3.5	9.6	12.7
Blue Mesa	NS	--	--	---	---
Butte	1/27	15	2.8	7.8	---
Cochetopa Pass (B)	1/26	6	1.5	4.0	3.6
Crested Butte	1/27	17	2.9	8.2	7.4
Keystone	1/27	20	4.0	9.8	13.1
Lake City	1/25	8	0.9	4.1	---
Mesa Lakes (B)	1/26	17	2.4	6.6	10.5
McClure Pass	1/26	20	3.8	8.5	11.1
Park Cone	1/26	11	1.5	6.0	6.1
Park Reservoir	1/27	20	3.8	11.1	14.6
Porphyry Creek	1/28	22	4.5	8.5	10.0
Tomichi	1/28	16	3.1	6.4	8.1
Surface Creek					
Alexander Lake	1/28	19	3.5	9.6	12.7
Mesa Lakes	1/26	17	2.4	6.6	10.5
Park Reservoir	1/27	20	3.8	11.1	14.6
Uncompahgre River					
Ironton Park	1/31	20	4.2	8.8	8.0
Red Mountain Pass	1/27	32	5.9	16.7	19.0
Telluride (B)	1/27	15	2.2	5.2	4.7
COLORADO BASIN					
Blue River					
Blue River	1/28	14	2.4	5.6	5.2
Fremont Pass	1/27	22	4.0	11.0	9.8
Frisco Pass	NS	--	--	4.9	4.4
Grizzly Peak	1/26	27	5.8	10.4	10.6
Hoosier Pass (B)	1/28	14	3.0	8.2	8.0
Shrine Pass	1/27	22	4.0	9.1	10.3
Snake River	1/26	13	1.7	5.4	5.2
Summit Ranch	1/26	12	2.3	3.9	---
Colorado River					
Arrow	1/26	21	2.4	9.1	7.5
Berthoud Pass	1/28	27	5.1	7.4	9.4
Berthoud Summit	1/28	29	7.1	9.6	11.4
Cooper Hill				8.0	6.9
Fiddler Gulch	NS	--	---	---	9.0
Glenmar Ranch	1/27	14	2.4	4.9	5.1
Gore Pass	1/26	15	2.9	6.2	6.2
Grand Lake	1/26	17	2.1	5.2	4.9
Lake Irene	1/26	25	4.9	11.4	13.8
Lapland	1/26	12	2.0	5.4	6.6
Lulu	NS	--	---	---	---
Lynx Pass	1/26	19	3.1	6.8	7.6
McKenzie Gulch	1/28	10	1.2	3.8	4.1
Middle Fork	1/27	16	2.8	5.6	5.7
Milner	1/26	19	2.7	7.3	---
North Inlet	1/28	14	2.2	5.0	5.1
Pando	1/27	10	1.0	6.2	6.0
Phantom Valley	1/26	16	2.6	5.5	6.5
Ranch Creek	1/26	16	1.8	6.0	5.6
Tennessee Pass (B)	1/29	15	1.8	5.4	6.5
Vasquez	1/27	20	2.1	9.0	7.7
Roaring Fork					
Aspen	1/27	20	2.3	10.3	10.0
Independence Pass	1/21	16	1.7	7.9	9.7
Ivanhoe	1/27	26	4.5	9.6	10.2
Kiln	1/27	17	2.8	6.8	---
Lift	1/27	23	3.5	10.3	10.1
McClure Pass	1/26	20	3.8	8.5	11.1
Nast	1/27	9	1.3	3.8	4.3
North Lost Trail	1/26	15	3.0	6.7	10.0
Williams Fork River					
Glenmar Ranch	1/27	14	2.4	4.9	5.1
Jones Pass	1/28	26	3.1	7.4	8.7
Middle Fork	1/27	16	2.8	5.6	5.7
Willow Creek					
Granby	1/27	11	1.8	5.2	4.7
Willow Cr. Pass	1/27	16	3.2	6.4	7.7
Plateau Creek					
Mesa Lakes	1/26	17	2.4	6.6	10.5
Park Reservoir	1/27	20	3.8	11.1	14.6
Trickle Divide	1/27	23	4.3	12.3	16.0
YAMPA BASIN					
Elk River					
Elk River	1/26	23	4.2	12.6	11.4
Hahn's Peak	1/26	20	3.1	10.0	---
White River					
Burro Mountain	1/26	20	4.4	7.0	11.5
Rio Blanco	1/27	18	4.0	8.2	9.0
Yampa River					
Bear River	NS	--	---	---	---
Columbine (B)	1/28	29	6.8	12.4	14.3
Crosho	NS	--	---	---	---
Dry Lake	1/27	25	5.1	10.4	12.0
Lynx Pass (B)	1/26	19	3.1	6.8	7.6
Rabbit Ears	1/28	28	5.7	13.0	16.1
Tower	1/27	50	12.5	24.4	---
Yampa View	1/28	21	4.3	8.9	9.8

NOTE: NS - No Survey
(B) - On Adjacent Drainage

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
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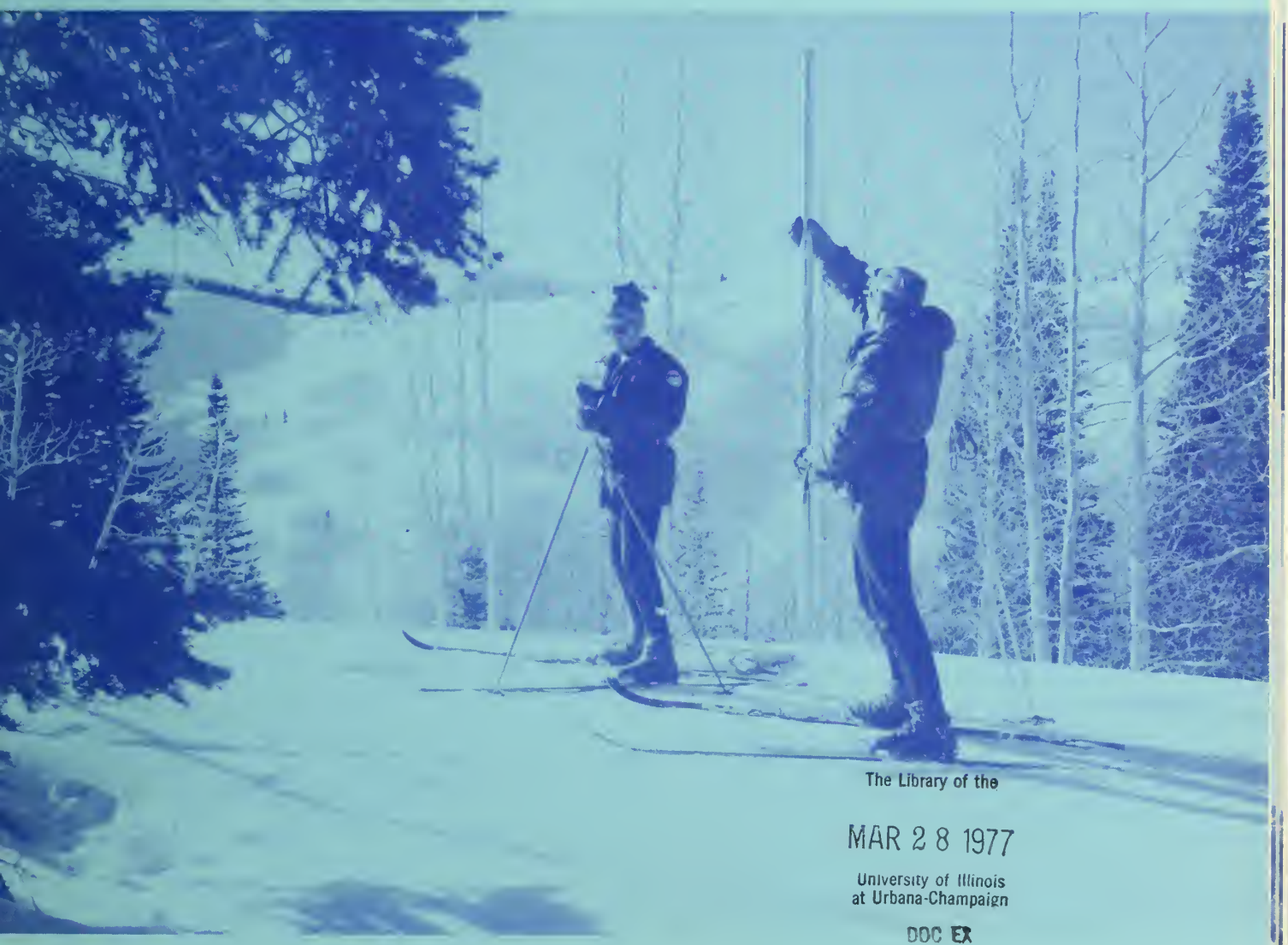
WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO



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Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
MAR. 1, 1977

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW COURSE MEASUREMENTS BY A SURVEY TEAM IN UTAH'S WASATCH RANGE.
ORC-254-10

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, 6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA-SCS-PORTLAND, OR 1976

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

ROBERT G. HALSTEAD

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

ALBERT W. HAMELSTROM

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
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EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
BERNARD A. SHAFER, Assistant Snow Survey Supervisor
JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
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WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Block Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Bronson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Hoxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WARNING

You may have less Irrigation water this year than ever before.

SNOW COURSE MEASUREMENTS MADE ON MARCH 1, 1977 CONTINUE TO INDICATE THAT MANY AREAS WILL HAVE SEVERE TO CRITICAL WATER SHORTAGES. STUDY THE ATTACHED WATER SUPPLY FORECAST CAREFULLY FOR STREAM FLOW AND/OR RESERVOIR STORAGE FIGURES THAT CONCERN YOUR AREA. KEEP IN TOUCH WITH YOUR IRRIGATION DISTRICT OR OTHER OFFICIALS FOR ESTIMATES OF THE SUPPLY AVAILABLE FOR YOU. YOU MAY FIND YOU'LL NEED TO CHANGE CROPS, PLANTED ACREAGE, TIMING OF WATER APPLICATION OR EFFICIENCY OF YOUR WATER DISTRIBUTION SYSTEM. THESE ARE SOME OF THE EARLY DECISIONS AND PLANS YOU MAY HAVE TO MAKE:

1. Change to crops which require less water.

2. Reduce the crop acreage. Naturally, this will affect the fertilizer you order and the amount of seed you buy. Be sure unplanted land has cover crops to prevent wind erosion.

3. Check out your irrigation systems carefully. Make certain that ditches have no water-wasting weeds or debris to slow delivery; that sprinkler heads don't have leaks, pipes have tight connections and pumps work properly. If new parts or equipment are needed, purchase them soon.

4. Plant only the best land - it makes most efficient use of water. If your soil has been mapped, local Soil Conservation Service personnel can guide you. If not mapped, they can still give you general information.

5. Maintain close contact with the Soil Conservation Service or your local Conservation District for the latest water supply forecasts, and for soil information. SCS has just published water conservation TIPS pamphlets for irrigators, farmers and ranchers. Get copies.

6. Maintain close contact with the Agricultural Stabilization and Conservation Service county office. Funds for cost sharing on special water stretching practices may be made available because of the drought situation. ASCS also administers the Federal Disaster Assistance program.

7. Do the same with your closest Farmers Home Administration office. Special loans may become available.

8. Do the same with the local Cooperative Extension Service office for current information on crops, feed supply and marketing.

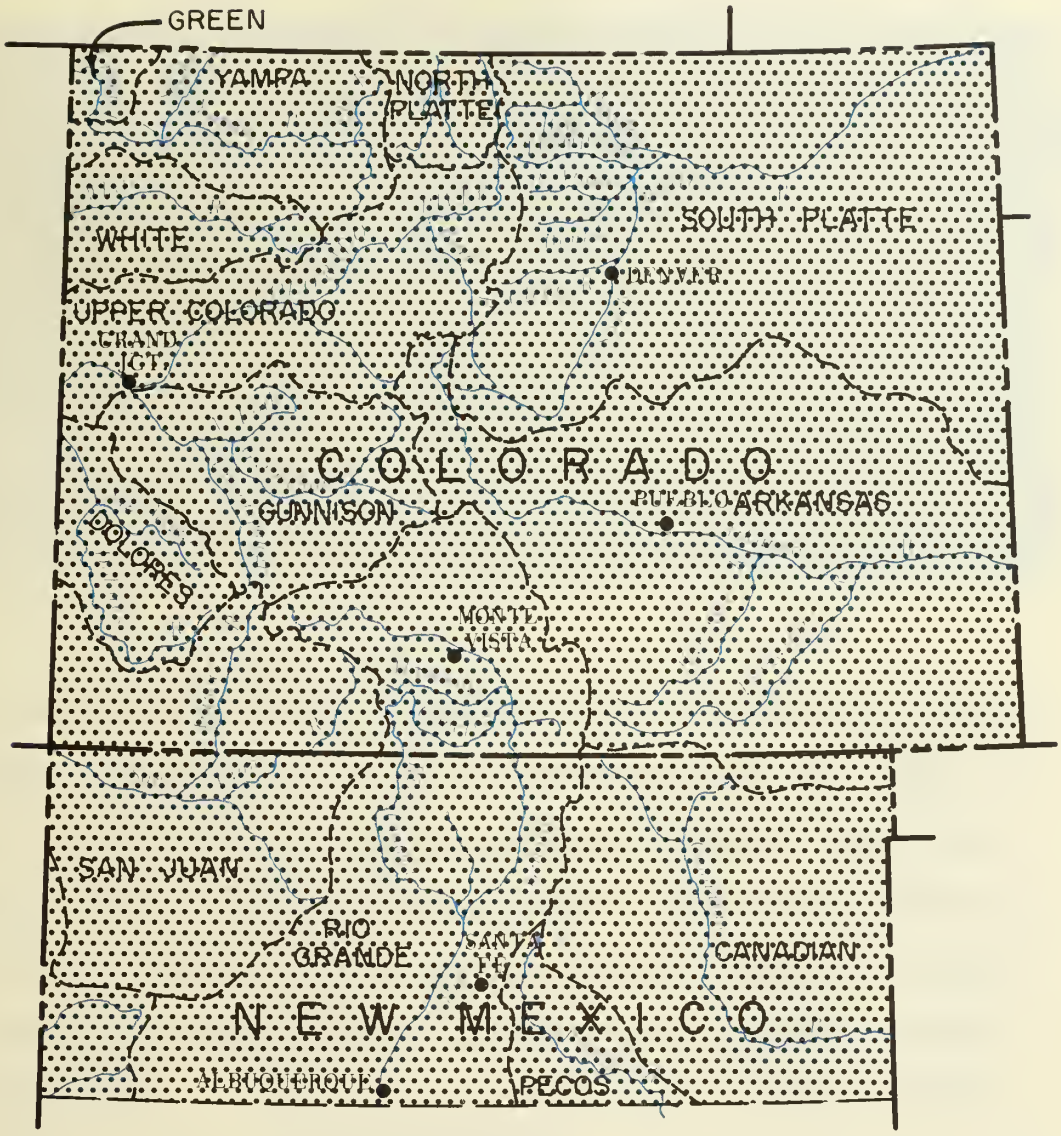
SCS, ASCS AND FMHA ARE LISTED IN THE PHONE BOOK UNDER "U.S. GOVERNMENT, AGRICULTURE, DEPARTMENT OF." THE EXTENSION SERVICE IS USUALLY LISTED WITH LOCAL COUNTY OFFICES.

USDA SCS-PORTLAND, OR 1976

WATER SUPPLY OUTLOOK

as of

MARCH 1, 1977



GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
MARCH 1, 1977

MOST OF THE MOUNTAIN AREAS OF COLORADO AND NEW MEXICO WERE HIT BY A MONTH-END STORM. THE STORM PRODUCED CONSIDERABLE SNOW IN NORTHERN AND SOUTH-CENTRAL COLORADO AND NORTHERN NEW MEXICO. DESPITE THIS STORM MOST OF THE SNOW COURSES ARE BELOW OR NEAR MINIMUM OF RECORD. THIS WILL RESULT IN MUCH BELOW NORMAL SUMMER WATER SUPPLIES. WATER CONSERVATION WILL BE THE BY-WORD THIS SUMMER. SOILS ARE DRY.

COLORADO -- SEVENTY-FIVE PERCENT OF THE SNOW COURSES IN COLORADO ARE BELOW THE MINIMUM OF RECORD. THE MONTH-END STORM ADDED CONSIDERABLE SNOW TO THE RABBIT EARS AND LA VETA PASS AREAS. THE AREAS ARE STILL BELOW NORMAL. SUMMER STREAMFLOWS WILL BE NEAR THE MINIMUM OF RECORD UNLESS MARCH AND APRIL PROVIDE MUCH ABOVE NORMAL PRECIPITATION. SOILS ARE GENERALLY DRY. CARRYOVER STORAGE IS GOOD ON THE SOUTH PLATTE AND ITS TRIBUTARIES.

NEW MEXICO -- SUMMER STREAMFLOW IS EXPECTED TO BE NEAR RECORD LOW THIS SUMMER EXCEPT ON THE PECOS. THE SNOWPACK ON THE PECOS WATERSHED IS NEAR NORMAL. SNOWPACK ON THE HEADWATERS OF THE RIO GRANDE IN COLORADO IS ONLY 25% OF NORMAL AND ONLY 27% OF NORMAL ON THE SAN JUAN. FLOWS FROM TRIBUTARY STREAMS IN NEW MEXICO WILL NOT IMPROVE CONDITIONS. SOILS ARE GENERALLY DRY. CONSIDERABLE SNOW WATER WILL BE REQUIRED TO FILL THE SOIL MOISTURE VOID. HEAVY MARCH SNOWFALL IS BADLY NEEDED.

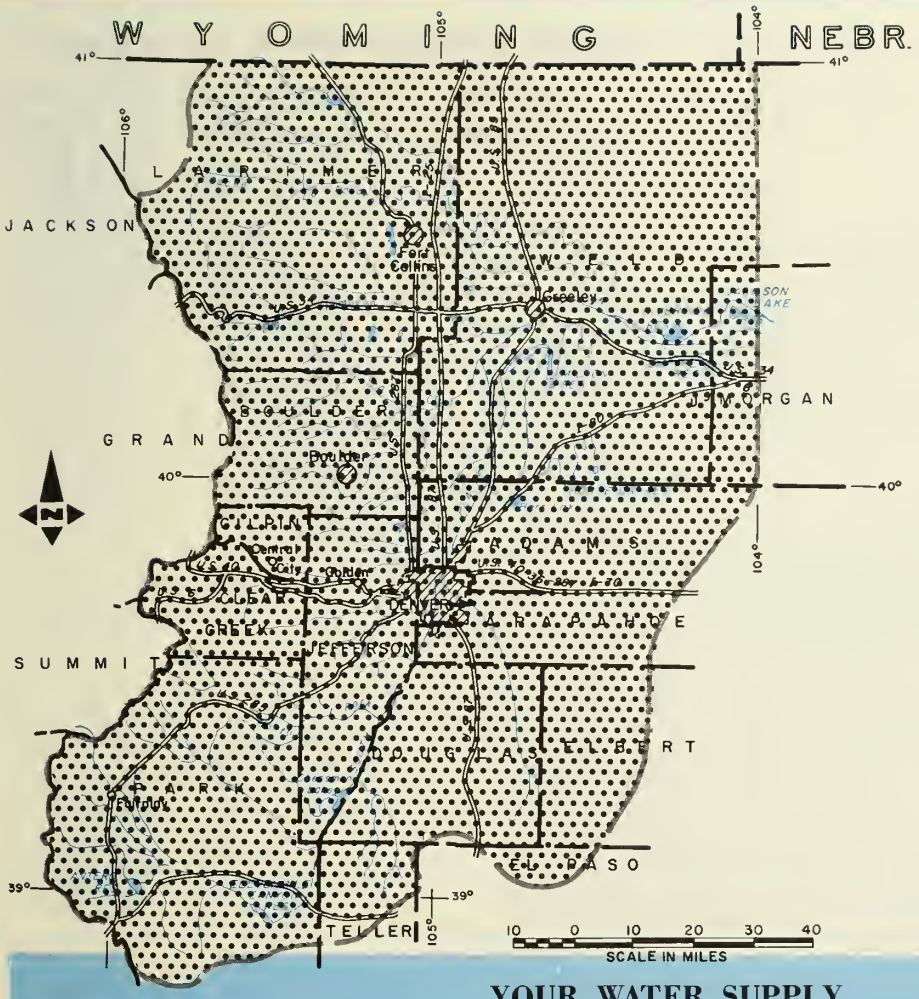
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

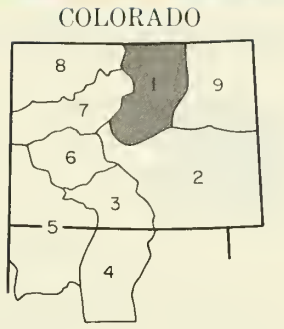
as of

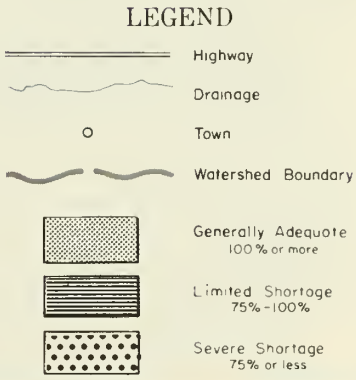
MARCH 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO







YOUR WATER SUPPLY

THE SNOWPACK SITUATION HAS WORSENED FROM LAST MONTH. THE PACK IS NOW 60% TO 70% BELOW NORMAL IN MOST DRAINAGES WITH ABOUT 80% OF THE SNOW SEASON COMPLETED. STREAMFLOW IS FORECAST TO BE NEAR MINIMUM OF RECORD IF AVERAGE PRECIPITATION IS RECEIVED THE REMAINDER OF THE SEASON. SOILS REMAIN DRY. RESERVOIR STORAGE IS NEAR AVERAGE.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

RODNEY M. ALT – AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Big Thompson River at Drake (1)	46	41	107
Boulder Creek at Orodell	25	50	49
Cache La Poudre River at Canyon Mouth (2)	118	48	247
Clear Creek at Golden (3)	51	40	127
St. Vrain Creek at Lyons (4)	30	40	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Poor	Poor
Coal Creek	Poor	Poor
North Fork of South Platte	Poor	Poor
North Fork of Cache La Poudre	Poor	Poor
Ralston Creek	Poor	Poor
Rock Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Big Thompson	5	24	24
Boulder	3	55	39
Cache La Poudre	7	34	32
Clear Creek	6	73	60
Saint Vrain	3	35	29
South Platte	2	42	42

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Antero	33	15	16	14
Barr Lake	32	29	26	23
Black Hollow	8	4	5	4
Boyd Lake	44	34	39	37
Cache La Poudre	10	0	6	8
Carter Lake	109	79	92	87
Chambers Lake	9	2	2	3
Cheesman	79	30	46	57
Cobb Lake	34	5	15	15
Eleven Mile	98	90	97	87
Fossil Creek	12	7	6	7
Gross	43	23	19	29
Halligan	6	2	5	4
Horsetooth	144	79	111	97
Lake Loveland	14	8	9	9
Lone Tree	9	3	5	7
Mariano	5	5	5	5
Marshall	10	4	5	4
Marston	18	16	15	15
Milton	24	16	16	13
Standley	42	28	31	17
Terry	8	6	6	5
Union	13	13	11	10
Windsor	19	9	13	10

* 1958-1972 period.

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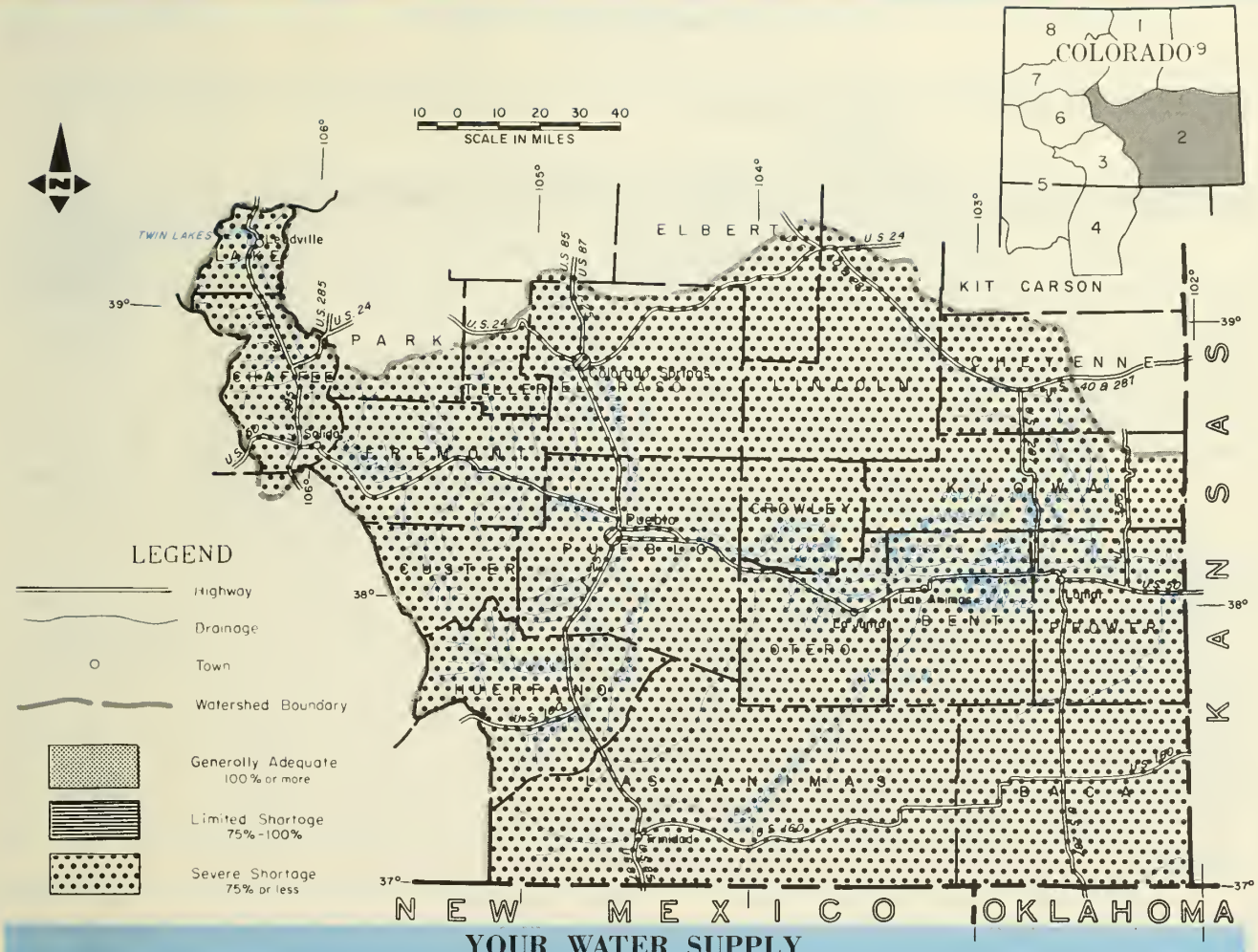
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO
as of
MARCH 1, 1977

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE ARKANSAS AND ITS SOUTHERN TRIBUTARIES WAS IMPROVED SLIGHTLY BY THE MONTH-END STORM, HOWEVER, THE SNOWPACK IS STILL BELOW NORMAL. THE ARKANSAS BASIN IS ESPECIALLY SHORT OF SNOW. STREAMFLOW FORECASTS WILL BE NEAR 50% OF NORMAL ON THE ARKANSAS BUT UP TO 70% ON SOUTHERN TRIBUTARIES. SOILS ARE DRY. STORAGE POOR. WATER WILL BE VERY SHORT UNLESS THE NEXT TWO MONTHS PRODUCE MUCH ABOVE AVERAGE SNOW.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D. W. GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Arkansas River near Pueblo (1)	139	48	290
Arkansas River at Salida (1)	155	49	313
Cucharas River near La Veta	8	80	10
Huerfano River near Redwing	8	53	15
Purgatoire River at Trinidad	21	55	38

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa River	Fair	Poor
Fountain Creek	Poor	Poor
Grape Creek	Poor	Poor
Hardscrabble Creek	Poor	Poor
Monument Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Arkansas	10	46	46
Cucharas	1	105	88
Purgatoire	1	72	71

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average *
Adobe	62	0	0	17
Clear Creek	11	6	5	8
Cucharas	40	-	0	3
Great Plains	150	0	0	59
Horse Creek	27	11	12	7
John Martin	354	20	9	90
Meredith	42	0	0	13
Model	15	0	0	4
Turquoise	121	31	50	--
Twin Lakes	58	7	17	26

* 1958-1972 period.

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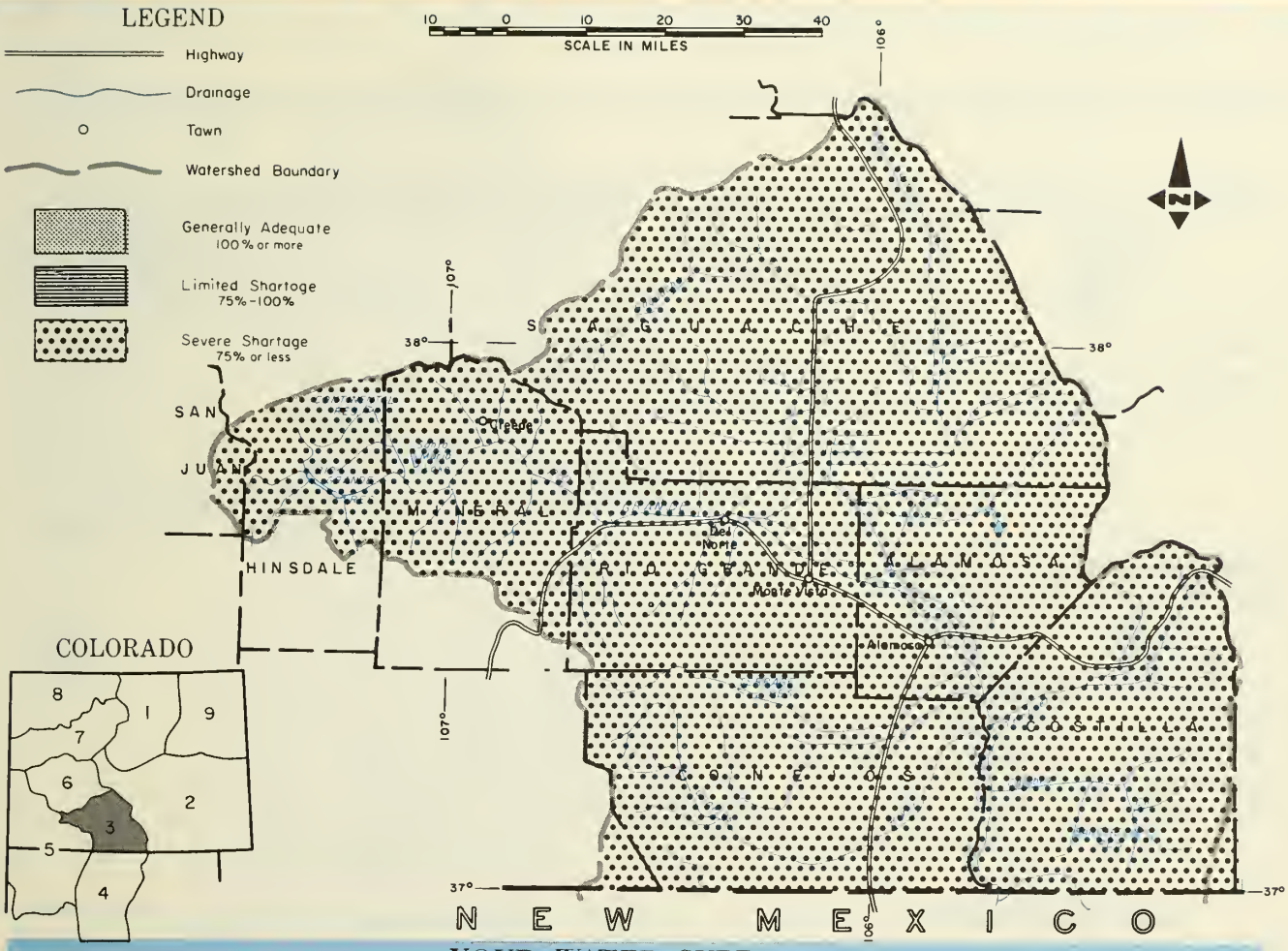
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

MARCH 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE RIO GRANDE DRAINAGE IS ONE OF THE LOWEST OF RECORD. THE CULEBRA DRAINAGE RECEIVED ADDITIONAL SNOW DURING THE MONTH-END STORM AND IS IN SURPRISINGLY GOOD SHAPE. AREAS ALONG THE SANGRE DE CRISTO MOUNTAINS HAS BY FAR THE BEST SNOW IN COLORADO. UNFORTUNATELY IT PRODUCES ONLY LIMITED WATER. CARRYOVER STORAGE IS POOR AND VALLEY SOILS ARE DRY. SUMMER STREAM-FLOW ON THE RIO GRANDE AND TRIBUTARIES WILL BE ONLY ABOUT HALF OF NORMAL.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

D. W. GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	* Average
Alamosa Creek above Terrace Reservoir	31	50	62
Conejos River near Mogote (1)	90	49	184
Culebra Creek at San Luis (2)	10	59	17
Rio Grande at 30 Mile Bridge (3)	77	64	121
Rio Grande near Del Norte (3)	250	54	467
South Fork of Rio Grande at South Fork	63	55	115

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservairs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Fair	Poor
Sangre de Cristo Cr.	Avg.	Poor
Trinchera Creek	Avg.	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Alamosa	--	--	--
Conejos	2	31	33
Culebra	2	82	70
Rio Grande	10	22	25

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Continental	27	2	5	5
Platoro	60	-	--	9
Rio Grande	46	3	17	17
Sanchez	103	4	--	13
Santa Maria	45	7	9	6
Terrace	18	4	9	6

* 1958-1972 period.

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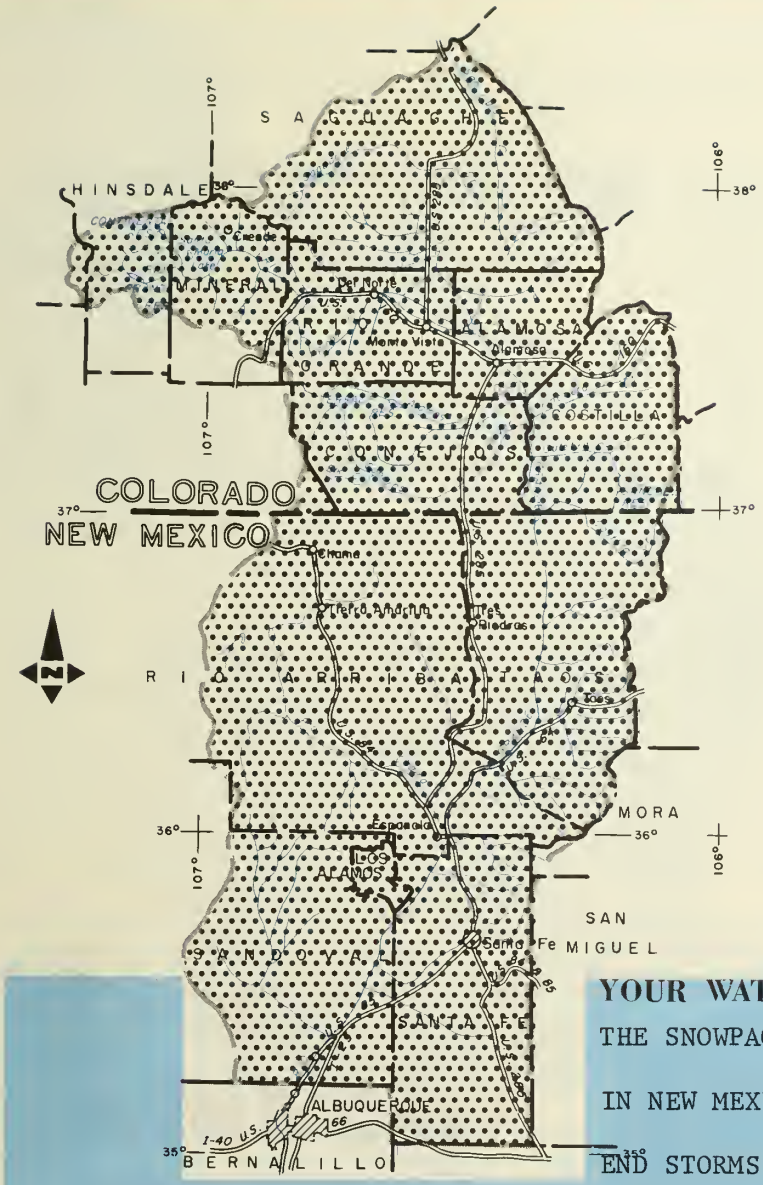
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO
as of
MARCH 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

THE SNOWPACK ALONG THE SANGRE DE CRISTO IN NEW MEXICO WAS IMPROVED BY THE MONTH-END STORMS. ALTHOUGH SNOW IS BELOW NORMAL IT IS MUCH BETTER THAN THE SNOWPACK ON THE SAN JUANS TO THE WEST. SUMMER FLOW WILL BE BELOW NORMAL ON ALL STREAMS IN NEW MEXICO WITH THE POSSIBLE EXCEPTION OF THE PECOS. SOILS ARE DRY.

This report prepared by

JACK N WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

A W HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

JAMES E TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) March—July

FORECAST POINT	FORE-CAST	% of Average	Average *
Costilla Creek at Costilla (1)	12	63	19
Jemez River near Jemez	18	62	29
Pecos River at Pecos	34	83	41
Red River at Mouth near Questa	20	69	29
Rio Chama at El Vado	73	38	190
Rio Grande at Otowi (2)	210	40	526
Rio Grande at San Marcial (2)	145	41	355
Rio Hondo near Valdez	6	43	14
Santa Cruz River at Cundiyo	7	54	12

(1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo Creek	Fair	Poor
Mora River	Fair	Poor
Nambe Creek	Fair	Poor
Rio Ojo Caliante	Fair	Poor
Rio Pueblo de Taos	Fair	Poor
Santa Fe, Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Pecos	1	135	106
Red River	2	35	56
Rio Chama	3	27	34
Rio Grande, NM	8	58	62
Rio Hondo	-	--	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Avalon	5	4	3	--
Caballo	344	142	45	87
Conchas	273	84	84	186
El Vado	195	110	126	3
Elephant Butte	2195	343	716	439
McMillan	34	4	6	--
Sumner	111	26	37	79

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
MARCH 1, 1977

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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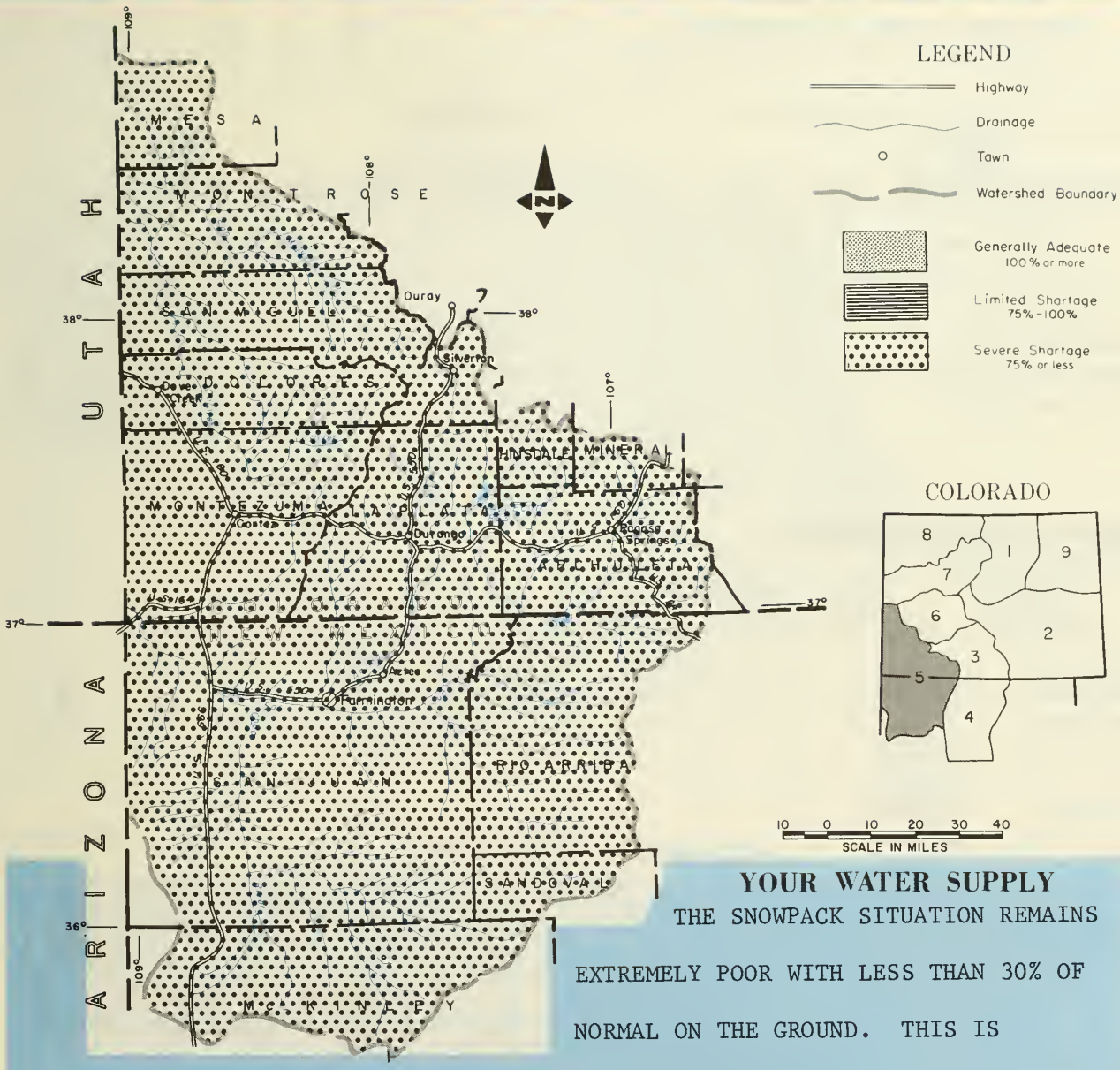

YOUR WATER SUPPLY

THE SNOWPACK SITUATION REMAINS EXTREMELY POOR WITH LESS THAN 30% OF NORMAL ON THE GROUND. THIS IS PARTICULARLY BAD NEWS SINCE 85% OF THE WINTER IS BEHIND US. STREAMFLOW IS FORECASTED TO BE NEAR MINIMUM OF RECORD ON ALL STREAMS. WATER SHORTAGES ARE EMINENT. SOILS REMAIN DRY.

This report prepared by

JACK N WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

A W HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

D W GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Animas River at Durango	235	56	423
Dolores River at Dolores	100	43	232
La Plata River at Hesperus	9	38	24
Los Pinos River at Bayfield (1)	100	50	198
Mancos River near Towac (3)	5	36	14
Inflow to Navajo River (1 & 2)	233	39	597
Piedra Creek at Arboles	70	38	185
San Juan River at Carracas	138	39	354
San Miguel River at Placerville	80	62	130

(1) Observed flow plus change in storage in Vallicito Reservoir. (2) April - July (3) March-July

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida River	Poor	Poor
Hermosa Creek	Poor	Poor
West Dolores River	Poor	Poor
Williams Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Animas	6	21	25
Dolores	4	26	28
San Juan	5	22	27

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Groundhog	22	7	9	9
Jackson Gulch	10	4	6	4
Lemon	40	17	19	19
Navajo	1036	1120	1100	1203*
Vallecito	126	47	55	54

*Less than 15 yrs.

* 1958-1972 period

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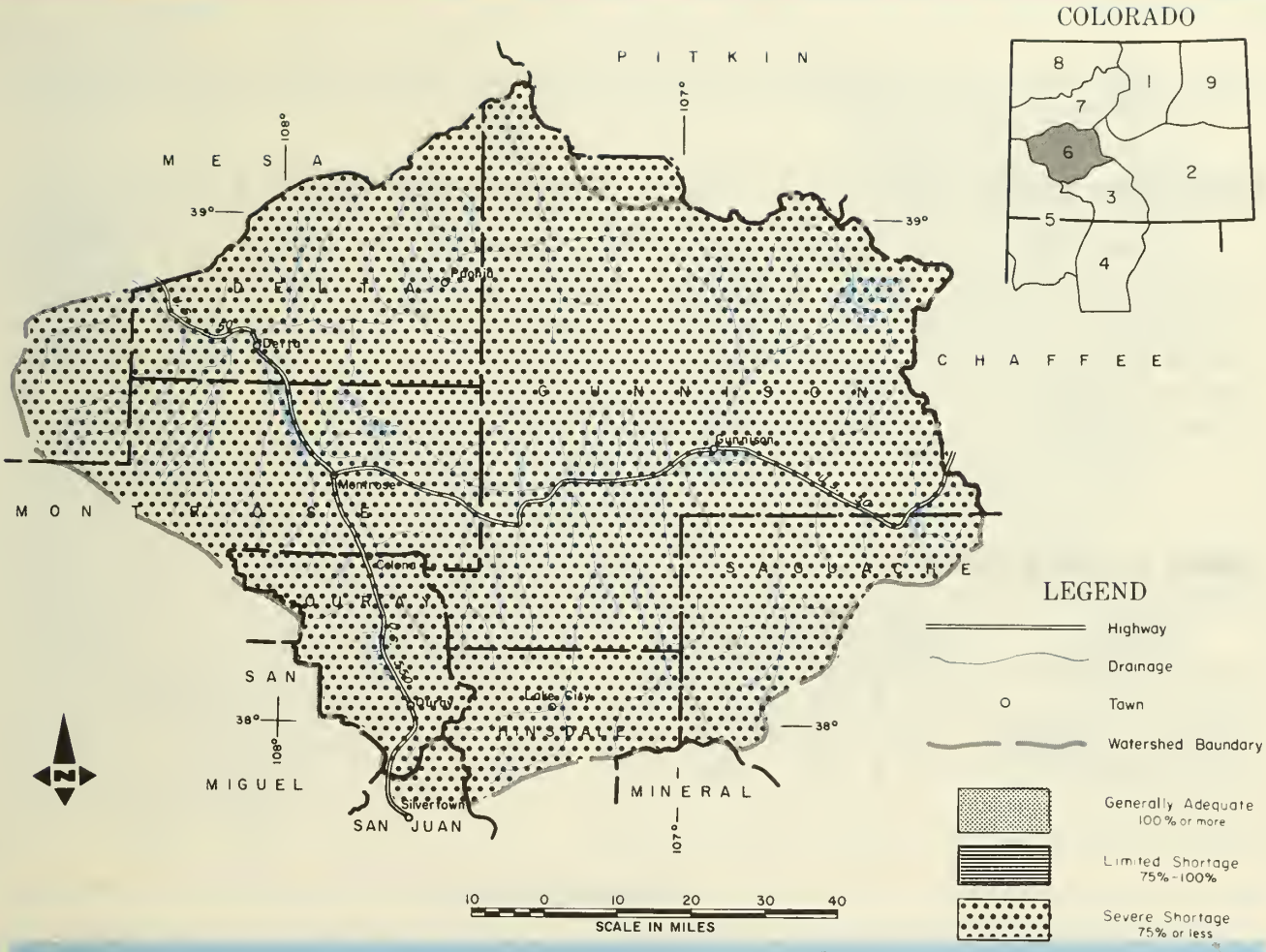
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STORMS LATE IN FEBRUARY BROUGHT ONLY MARGINAL IMPROVEMENT IN THE MOUNTAIN SNOWPACK. IT REMAINS 60 to 70% BELOW NORMAL WITH OVER 80% OF THE SNOW SEASON BEHIND US. MANY SNOW COURSES WERE MINIMUM OF RECORD. STREAMFLOW WILL LIKELY BE LESS THAN HALF OF NORMAL IF AVERAGE PRECIPITATION IS RECEIVED FROM NOW ON. SLIGHTLY ABOVE AVERAGE RESERVOIR STORAGE WILL HELP REDUCE THE IMPACT OF EXPECTED WATER SHORTAGES THIS SUMMER.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Gunnison River inflow to Blue Mesa Reservoir (1)	347	44	792
Gunnison River near Grand Junction (2)	500	42	1184
North Fork of Gunnison (3)	120	46	263
Surface Creek near Cedaredge	10	63	16
Uncompahgre River at Colona	59	44	134

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ohio Creek	Poor	Poor
Slate River	Poor	Poor
Taylor River	Poor	Poor
Tomichi Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Gunnison	12	35	35
Surface Creek	3	23	31
Uncompahgre	3	35	39

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Blue Mesa	830	394	440	354
Morrow Point	121	115	115	109
Taylor	106	57	62	65

* 1958-1972 period

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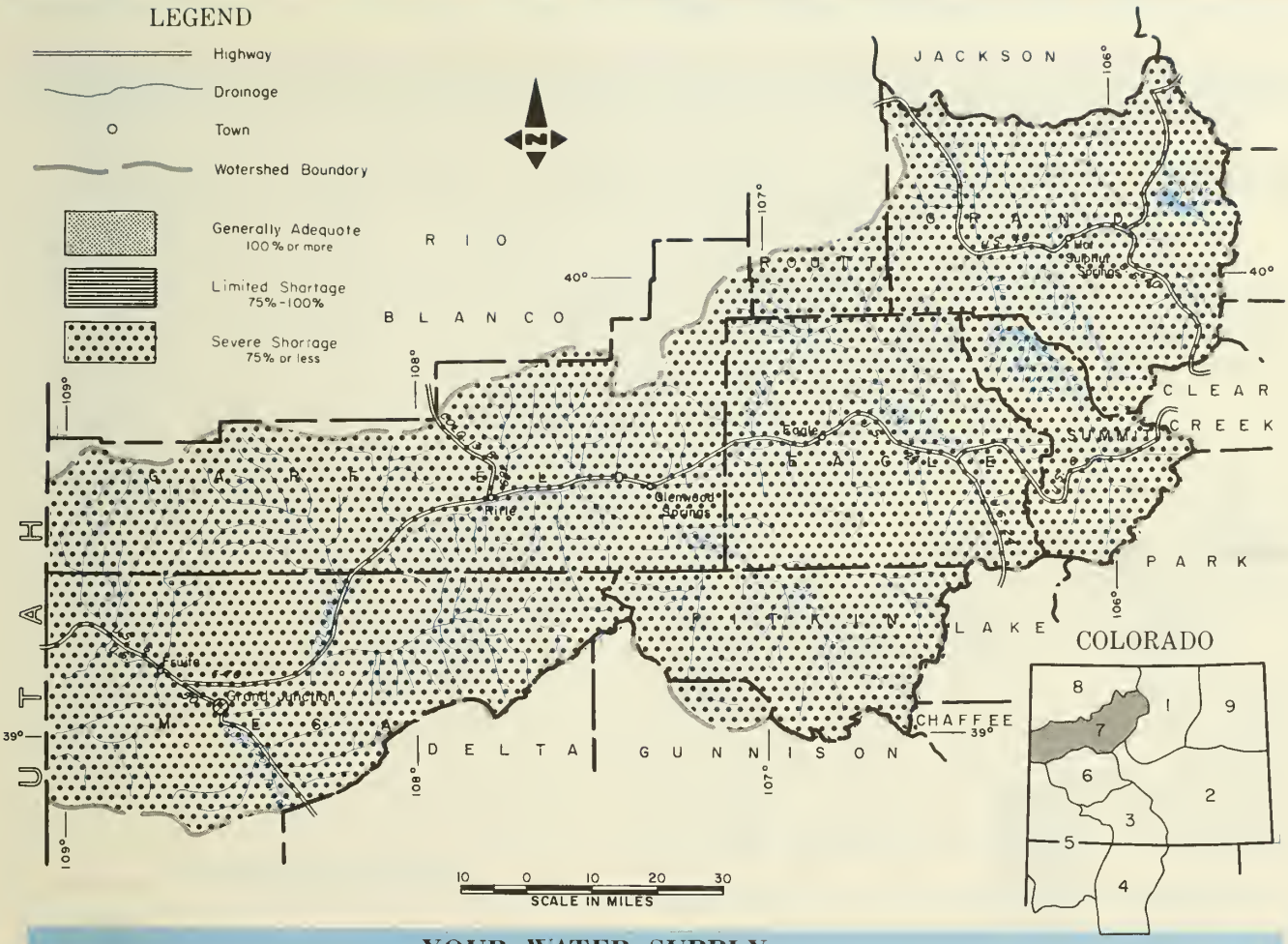
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK REMAINS ABOUT 60% BELOW NORMAL. STORMS LATE IN FEBRUARY BROUGHT LITTLE IMPROVEMENT IN THE HIGH COUNTRY. MOST SNOW COURSE MEASUREMENTS WERE THE MINIMUM OF RECORD. APPROXIMATELY 80% OF THE WINTER IS GONE. STREAMFLOW IS PROJECTED TO BE NEAR HALF OF NORMAL IF AVERAGE PRECIPITATION IS RECEIVED THE REMAINDER OF THE SEASON. SOILS REMAIN DRY. CARRYOVER RESERVOIR STORAGE IS GOOD AND WILL HELP TO SOME EXTENT ALLEVIATE EXPECTED WATER SHORTAGES.

This report prepared by

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SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

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DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Blue River inflow to Dillon Reservoir	92	54	169
Blue River inflow to Green Mountain Reservoir (1)	130	54	297
Colorado River near Cameo (6)	1140	48	2370
Colorado River near Dotsero (3)	675	47	1434
Colorado River inflow to Granby Reservoir (2)	116	51	228
Roaring Fork at Glenwood Springs (4)	375	53	713
Williams Fork near Parshall (5)	25	40	63
Willow Creek inflow to Willow Creek Reservoir	20	40	47

(1) Observed flow plus diversions through Roberts Tunnel and chonge in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel ond Grand River Ditch. (3) Observed flow plus the changes as indicoted in (1), (2) and (5) plus Moffat Ditch ond change in Homestake, Willioms Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels alus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicoted in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Fair	Poor
Eagle River	Fair	Poor
Gypsum Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Blue River	8	47	45
Colorado	17	43	40
Plateau	3	28	29
Roaring Fork	7	37	38
Williams Fork	3	54	49
Willow	2	33	34

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Dillon	254	210	226	233
Granby	466	191	299	235
Green Mountain	139	71	76	67
Homestake	43	23	0	17
Ruedi	101	68	61	65
Vega	32	6	13	11
Williams Fork	97	48	48	29
Willow Creek	9	6	7	7

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
MARCH 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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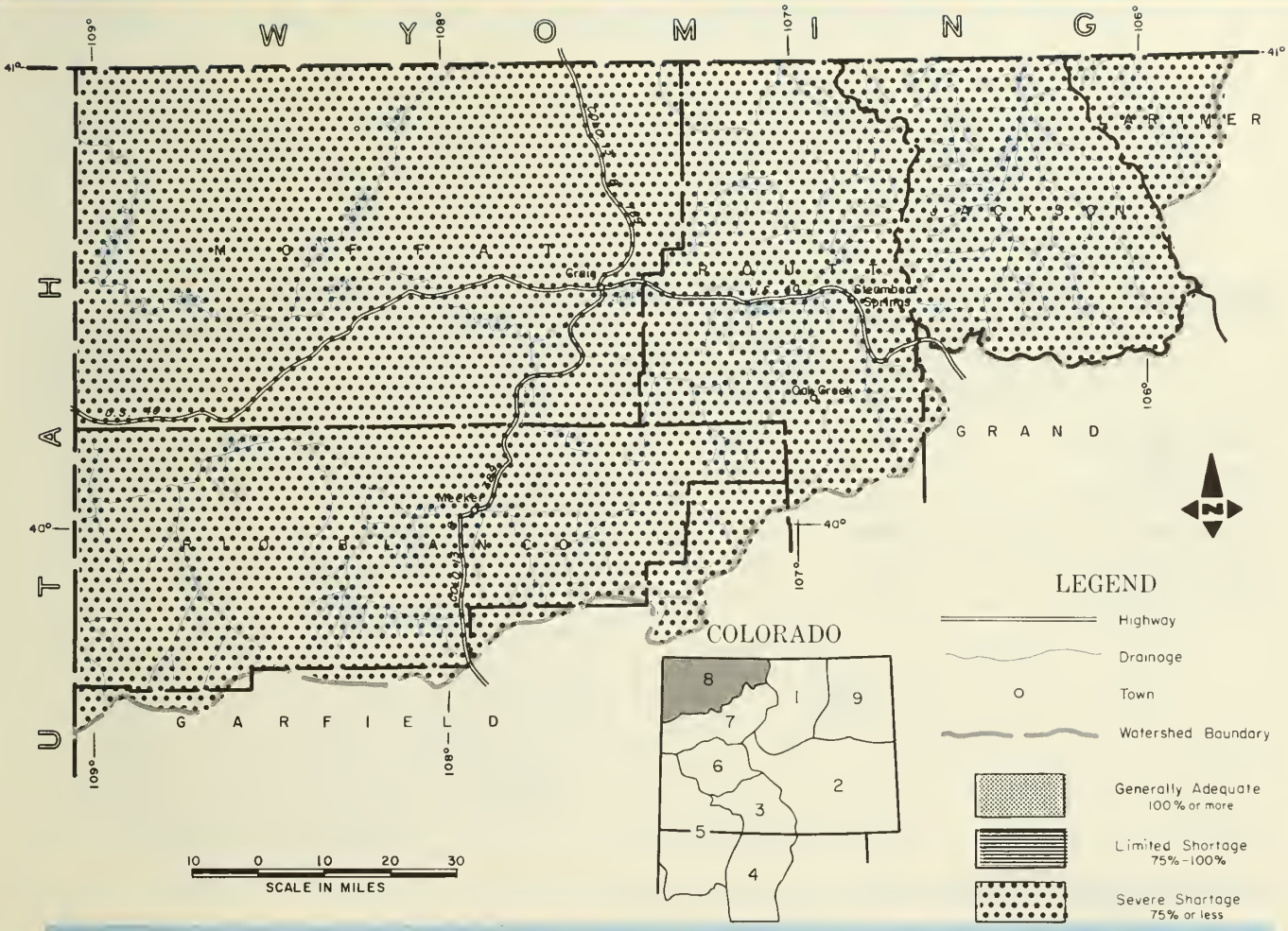

YOUR WATER SUPPLY

STORMS LATE IN FEBRUARY BROUGHT ONLY MINOR IMPROVEMENT IN THE SNOWPACK. THE SNOWPACK REMAINS ONE-THIRD TO ONE-HALF OF NORMAL WITH ABOUT 85% OF THE SNOW SEASON COMPLETED. STREAMFLOW FORECASTS PROJECT NEAR MINIMUM OF RECORD FLOWS FOR ALL STREAMS ASSUMING NORMAL PRECIPITATION IS RECEIVED THE REMAINDER OF THE SEASON. SOILS REMAIN RELATIVELY DRY.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Elk River at Clark	120	61	198
Laramie River near Woods	47	37	127
Little Snake River at Lily	133	41	324
North Platte River at Northgate	95	40	240
White River near Meeker	155	52	295
Yampa River near Maybell	450	50	905
Yampa River at Steamboat Springs	123	45	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Fair	Poor
Hunt Creek	Fair	Poor
Illinois River	Fair	Poor
Michigan River	Fair	Poor
Oak Creek	Fair	Poor
Trout Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Elk	2	50	47
Laramie	2	37	36
North Platte	4	48	46
White	2	38	33
Yampa	5	56	46

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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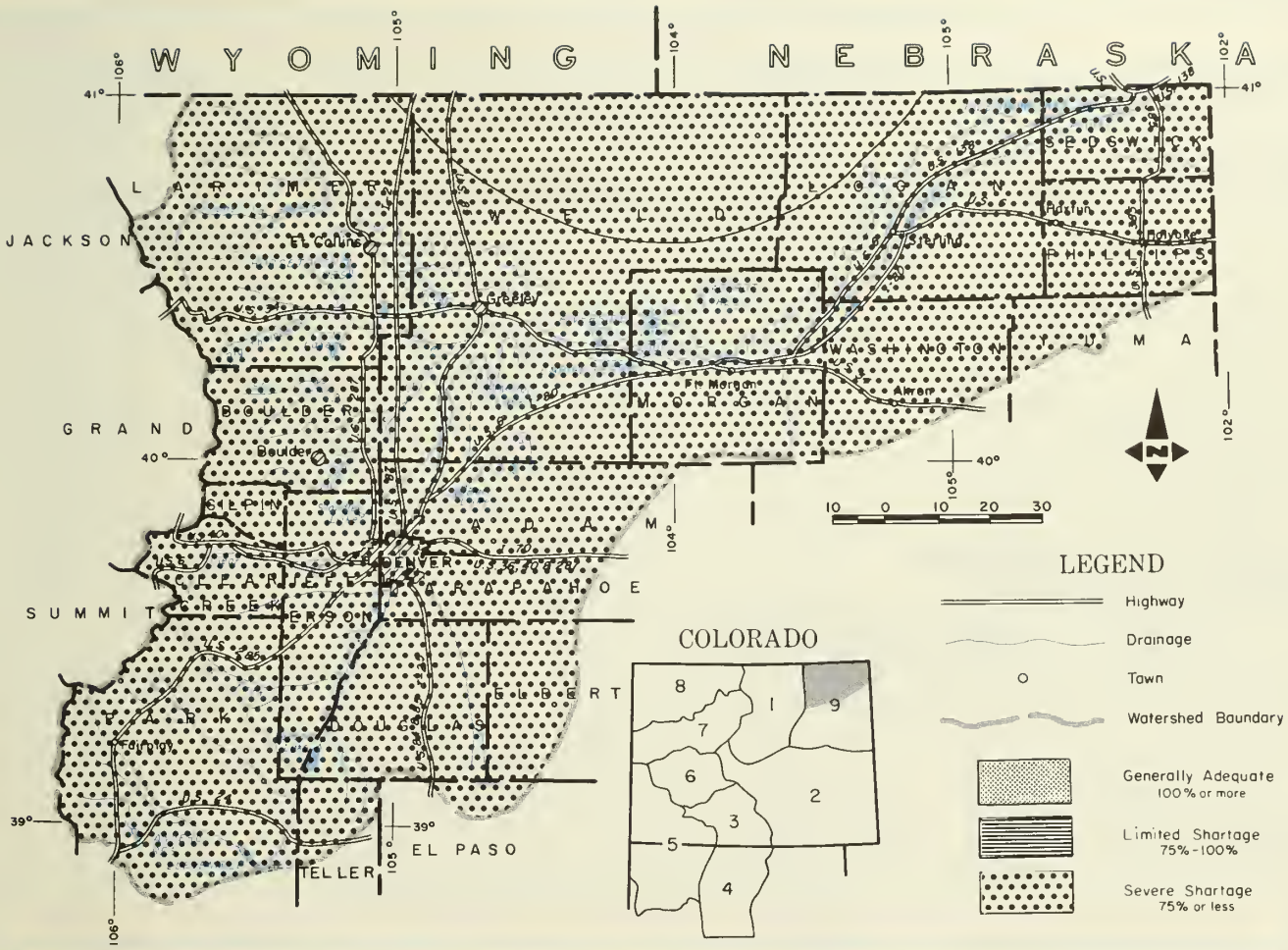

YOUR WATER SUPPLY

THE SNOWPACK ON THE SOUTH PLATTE AND ITS NORTHERN TRIBUTARIES IS EXTREMELY SHORT. A NUMBER OF SNOW MEASUREMENTS INDICATE A MINIMUM OF RECORD. SUMMER FLOWS WILL ALSO BE VERY SHORT ESPECIALLY MIDDLE AND LATE SEASON. FORECASTS ARE GENERALLY FOR LESS THAN HALF OF NORMAL FLOWS. SOIL MOISTURE IN MOUNTAINS AND PLAINS IS POOR. CARRYOVER STORAGE IS GOOD AND WILL BE AN EXCELLENT SUPPLEMENTAL SUPPLY.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M. ALT—AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	46	41	107
Boulder Creek at Orodell	25	50	49
Cache La Poudre River at Canyon Mouth (2)	118	48	247
Clear Creek at Golden (3)	51	40	127
Saint Vrain Creek at Lyons (4)	30	40	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
South Platte from Greeley to Fort Morgan	Poor	Poor
South Platte from Fort Morgan to Sterling	Poor	Poor
South Platte below Sterling	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average*
Big Thompson	5	24	24
Boulder	3	55	39
Cache La Poudre	7	34	32
Clear Creek	6	73	60
Saint Vrain	3	35	29
South Platte	2	42	42

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Carter	109	79	92	87
Cheesman	79	30	46	57
Eleven Mile	98	90	97	87
Empire	38	31	32	30
Horsetooth	144	79	111	97
Jackson	35	32	29	32
Julesburg	28	21	20	20
Point of Rocks	70	62	70	59
Prewitt	33	27	25	18
Riverside	58	42	46	53

* 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of MARCH 1, 1977

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	2/24	21	3.9	11.1	14.1
McIntyre	NS			---	---
Roach	2/25	31	6.5	17.1	14.9
North Platte River					
Cameron Pass	2/25	39	10.9	22.6	22.5
Columbine Lodge	2/28	53	10.9	17.8	20.4
Northgate	2/25	13	2.1	4.7	5.5
Park View	2/24	16	2.5	7.8	7.8
Willow Cr. Pass (B)	2/28	21	3.8	10.3	10.4
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	2/25	15	3.6	3.7	6.2
Boulder Falls	2/24	22	3.8	7.3	10.3
University Camp	2/24	27	4.9	11.4	15.1
Big Thompson River					
Deer Ridge	2/28	2	0.1	3.0	4.0
Hidden Valley	2/28	15	2.1	10.1	8.1
Lake Irene (B)	2/23	32	5.8	17.2	19.0
Long's Peak	2/24	9	1.8	8.8	8.5
Two Mile	2/28	16	2.4	11.0	11.9
Cache La Poudre					
Bennett Creek	2/25	7	1.1	5.6	---
Big South	2/25	6	0.7	0.2	2.3
Cameron Pass	2/25	39	10.9	22.6	22.5
Chambers Lake	2/25	8	1.0	8.7	8.1
Deadman Hill	2/24	21	3.9	11.1	14.1
Hourglass Lake	2/25	8	1.4	5.8	5.3
Joe Wright	2/25	50	11.6	18.7	---
Lost Lake	2/28	18	3.0	10.0	10.2
Red Feather	2/24	6	0.9	5.5	5.4
Clear Creek					
Baltimore (B)	2/25	15	3.6	3.7	6.2
Berthoud Falls	2/25	24	6.0	9.3	11.6
Empire	2/25	15	3.4	5.6	6.0
Grizzly Peak (B)	2/25	35	8.7	12.7	14.6
Loveland Lift	2/25	42	11.7	12.9	16.9
Loveland Pass	2/25	30	7.4	11.9	12.7
St. Vrain River					
Copeland Lake	2/25	8	0.9	3.0	3.8
Ward	2/28	11	2.0	3.8	4.8
Wild Basin	2/25	15	2.4	8.3	9.9
South Platte River					
Como	2/28	8	1.5	5.7	---
Geneva Park	3/01	3	0.5	4.1	3.3
Horseshoe Mt.	2/23	20	3.2	8.1	---
Hoosier Pass	2/24	21	4.7	10.2	10.6
Jefferson Creek	2/24	16	2.9	8.1	7.6
Mosquito	2/28	19	3.8	8.5	---
Trout Creek Pass	2/23	6	1.1	3.8	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	2/28	32	6.2	5.8	5.1
Cooper Hill (B)	2/28	26	3.1	10.2	9.0
East Fork	2/25	21	3.5	9.4	8.0
Four Mile Park	3/01	11	1.8	5.3	5.1
Fremont Pass	2/25	31	6.2	14.4	12.9
Garfield	2/28	24	4.2	8.4	11.3
Hermit Lake	2/24	15	3.2	7.0	---
Monarch Pass	2/28	30	6.5	11.6	14.0
Tennessee Pass	3/01	22	3.1	8.7	8.7
Twin Lakes Tunnel	2/27	17	2.5	8.4	8.9
Westcliffe	2/24	19	3.8	7.0	6.0
Cucharas River					
Apishapa	2/24	17	4.5	5.9	---
Cucharas Creek	2/24	23	5.4	6.8	---
La Veta Pass (B)	2/28	32	6.3	6.0	7.2
Purgatoire River					
Bourbon	2/28	29	4.2	5.8	5.9
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	2/24	3	0.3	7.9	5.1
Summitville	Discontinued			17.6	14.7
Conejos River					
Cumbres	2/24	22	5.7	16.5	16.5
La Manga	2/24	26	4.0	16.9	---
Platoro	2/27	20	4.2	15.7	13.9
River Springs	NS	--	---	4.9	5.0
Culebra River					
Brown Cabin	2/24	12	2.6	3.1	---
Cottonwood (B)	2/24	9	2.1	---	---
Culebra	2/23	20	3.9	6.5	7.4
La Veta Pass (B)	2/28	32	6.3	6.0	7.2
Trinchera (B)	2/25	23	4.0	7.0	---
Rio Grande					
Cochetopa Pass	2/23	8	1.6	4.9	4.8
Grayback	2/28	18	3.1	14.9	---
Hiway	2/24	21	4.2	23.4	19.5
Lake Humphrey	2/23	11	1.7	8.5	6.1
Love Lake	2/23	10	0.9	10.2	---
Pass Creek	2/24	14	2.3	13.4	9.9
Pool Table	2/23	11	0.9	4.8	6.0
Porcupine	2/28	12	2.5	9.4	9.1
Santa Maria	2/28	6	1.2	4.2	4.1
Upper Rio Grande	2/28	11	2.1	7.4	7.6
Wolf Creek Pass	2/24	28	5.8	26.6	22.0
Wolf Cr. Summit (B)	2/24	24	5.2	25.0	22.5
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela	2/24	10	3.5	2.6	3.3
Rio Chama					
Bateman	2/23	20	3.5	9.9	9.3
Chama Divide	2/23	3	0.6	5.3	3.0
Chamita	2/25	18	2.6	9.2	7.3
Rio Grande					
Alamitos	2/25	23	3.8	6.8	---
Big Tesuque	2/28	16	3.2	5.2	4.9
Cordova	2/28	28	4.3	11.1	9.6
Elk Cabin	2/24	5	1.0	2.8	3.1
Hopewell	2/24	24	4.7	15.2	---
La Cueva	2/25	18	4.4	3.0	---
Palo	2/22	18	3.2	9.2	---
Payrole	3/01	15	3.8	7.6	7.8
Quemazon	2/25	22	4.9	4.9	7.8
Rio En Medio	2/28	29	5.9	7.4	8.0
Sandoval	2/28	14	3.6	2.7	4.5
Senorita Divide	2/25	21	4.6	5.0	---
Taos Canyon	2/22	12	2.9	7.7	3.8
Tres Ritos	2/28	17	2.7	7.4	4.6
North Costilla	2/25	22	3.2	---	---
Powderhouse	2/24	12	2.0	---	---
Rio Hondo					
Taos Powderhorn	2/24	38	12.0	22.9	---
Red River					
Hematite Park (B)	2/23	10	2.3	6.4	3.5
Red River	2/23	9	2.5	7.5	5.0
Red River #2	2/23	15	3.5	9.0	---

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of MARCH 1, 1977

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES) LAST YEAR	WATER CONTENT (INCHES) AVG 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	2/24	12	2.6	15.3	10.0
Lemon	2/28	11	2.4	12.5	---
Mineral Creek	2/24	21	3.1	15.9	12.9
Molas Lake	2/24	13	2.8	12.8	11.2
Purgatory	2/28	19	4.6	19.1	---
Red Mt. Pass (B)	2/24	43	7.3	25.8	25.4
Silverton Sub-Sta.	2/24	7	1.0	10.2	6.7
Spud Mountain	2/24	17	4.4	22.9	19.7
Dolores River					
Lizard Head	2/28	17	3.2	14.1	13.9
Lone Cone	2/25	26	4.2	17.1	---
Ophir Loop	2/24	28	5.2	10.1	---
Rico	2/28	5	0.8	6.7	7.2
Telluride	2/24	14	2.9	9.0	6.7
Trout Lake	2/24	25	4.2	12.3	11.8
San Juan River					
Chama Divide (B)	2/23	3	0.6	5.3	3.0
Chamita (B)	2/25	18	2.6	9.2	7.3
Upper San Juan	2/28	31	7.2	29.8	24.5
Wolf Cr. Pass (B)	2/24	28	5.8	26.6	22.0
Wolf Cr. Summit	2/24	24	5.2	25.0	22.5
GUNNISON BASIN					
Gunnison River					
Alexander Lake	2/28	26	6.1	17.6	17.4
Blue Mesa	2/28	19	3.3	7.8	6.9
Butte	2/23	24	4.5	12.0	---
Cochetopa Pass (B)	2/23	8	1.6	4.9	4.8
Crested Butte	2/23	26	4.8	13.8	10.3
Keystone	2/24	30	5.8	15.9	16.7
Lake City	2/22	9	1.3	6.1	7.0
Mesa Lakes (B)	2/25	26	4.0	12.4	13.5
McClure Pass	2/23	24	4.0	15.1	14.7
Park Cone	2/22	12	1.9	9.6	8.8
Park Reservoir	2/24	31	5.7	21.7	19.5
Porphyry Creek	2/28	29	5.8	11.0	13.7
Tomichi	2/28	29	5.8	8.2	10.5
Surface Creek					
Alexander Lake	2/28	26	6.1	17.6	17.4
Mesa Lakes	2/25	26	4.0	12.4	13.5
Park Reservoir	2/24	31	5.7	21.7	19.5
Uncompahgre River					
Ironton Park	2/28	29	6.7	13.0	11.3
Red Mountain Pass	2/24	43	7.3	25.8	25.4
Telluride (B)	2/24	14	2.9	9.0	6.7
COLORADO BASIN					
Blue River					
Blue River	2/24	19	3.5	7.5	7.4
Fremont Pass	2/25	31	6.2	14.4	12.9
Frisco Pass	2/25	0	0.0	6.9	6.4
Grizzly Peak	2/25	35	8.7	12.7	14.6
Hoosier Pass (B)	2/24	21	4.7	10.2	10.6
Shrine Pass	2/25	33	6.9	12.9	14.5
Snake River	2/25	16	3.1	6.3	7.0
Summit Ranch	2/23	16	3.1	5.2	7.0

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES) LAST YEAR	WATER CONTENT (INCHES) AVG 58-72
Colorado River					
Arrow	2/24	25	4.2	10.4	10.5
Berthoud Pass	2/25	32	6.0	10.8	12.8
Berthoud Summit	2/25	36	9.2	13.1	15.4
Cooper Hill	2/28	26	3.1	10.2	9.0
Fiddler Gulch	NS	--	---	---	14.0
Glenmar Ranch	2/24	17	3.4	6.9	7.0
Gore Pass	2/23	18	3.2	9.3	8.6
Grand Lake	2/23	22	2.9	7.1	7.0
Lake Irene	2/23	32	5.8	17.2	19.0
Lapland	2/23	16	2.7	7.3	9.0
Lulu	2/28	37	7.6	15.2	14.9
Lynx Pass	2/23	22	4.1	10.5	10.5
McKenzie Gulch	2/28	12	2.2	5.8	5.5
Middle Fork	2/24	20	3.8	6.7	8.1
Milner	2/23	22	3.8	10.4	---
North Inlet	2/24	15	2.9	6.6	7.6
Pando	2/25	15	2.2	7.4	8.2
Phantom Valley	2/23	18	3.4	8.1	9.3
Ranch Creek	2/24	16	2.8	7.1	7.8
Tennessee Pass (B)	3/01	22	3.1	8.7	8.7
Vasquez	2/25	27	4.6	9.6	10.2
Roaring Fork					
Aspen	2/25	30	5.8	16.0	14.0
Independence Pass	2/27	33	7.6	13.8	13.9
Ivanhoe	2/24	30	6.7	14.3	13.9
Kiln	2/24	22	4.0	10.5	---
Lift	2/25	30	5.0	14.5	13.6
McClure Pass	2/23	24	4.0	15.1	14.7
Nast	2/25	11	2.4	6.4	5.5
North Lost Trail	2/23	17	2.8	13.3	13.3
Williams Fork River					
Glenmar Ranch	2/24	18	3.4	6.9	7.0
Jones Pass	2/28	33	6.0	10.9	11.9
Middle Fork	2/24	20	3.8	6.7	8.1
Willow Creek					
Granby	2/24	13	2.0	7.1	6.5
Willow Cr. Pass	2/28	21	3.8	10.3	10.4
Plateau Creek					
Mesa Lakes	2/25	26	4.0	12.4	13.5
Park Reservoir	2/24	31	5.7	21.7	19.5
Trickle Divide	2/24	33	6.0	22.9	21.0
YAMPA BASIN					
Elk River					
Elk River	2/28	45	7.4	14.7	15.9
Hahn's Peak	2/28	33	6.0	12.8	---
White River					
Burro Mountain	2/23	30	5.0	13.8	15.0
Rio Blanco	2/24	23	4.3	10.8	13.1
Yampa River					
Bear River	2/23	20	3.2	8.8	---
Columbine (B)	2/28	53	10.9	17.8	20.4
Crosho	NS	--	---	---	---
Dry Lake	2/24	41	7.6	12.8	17.8
Lynx Pass (B)	2/23	22	4.1	10.5	10.5
Rabbit Ears	2/28	47	9.5	16.8	21.8
Tower	2/24	84	16.6	33.6	---
Yampa View	2/28	29	6.3	11.2	13.0

NOTE: NS - No Survey
(B) - On Adjacent Drainage

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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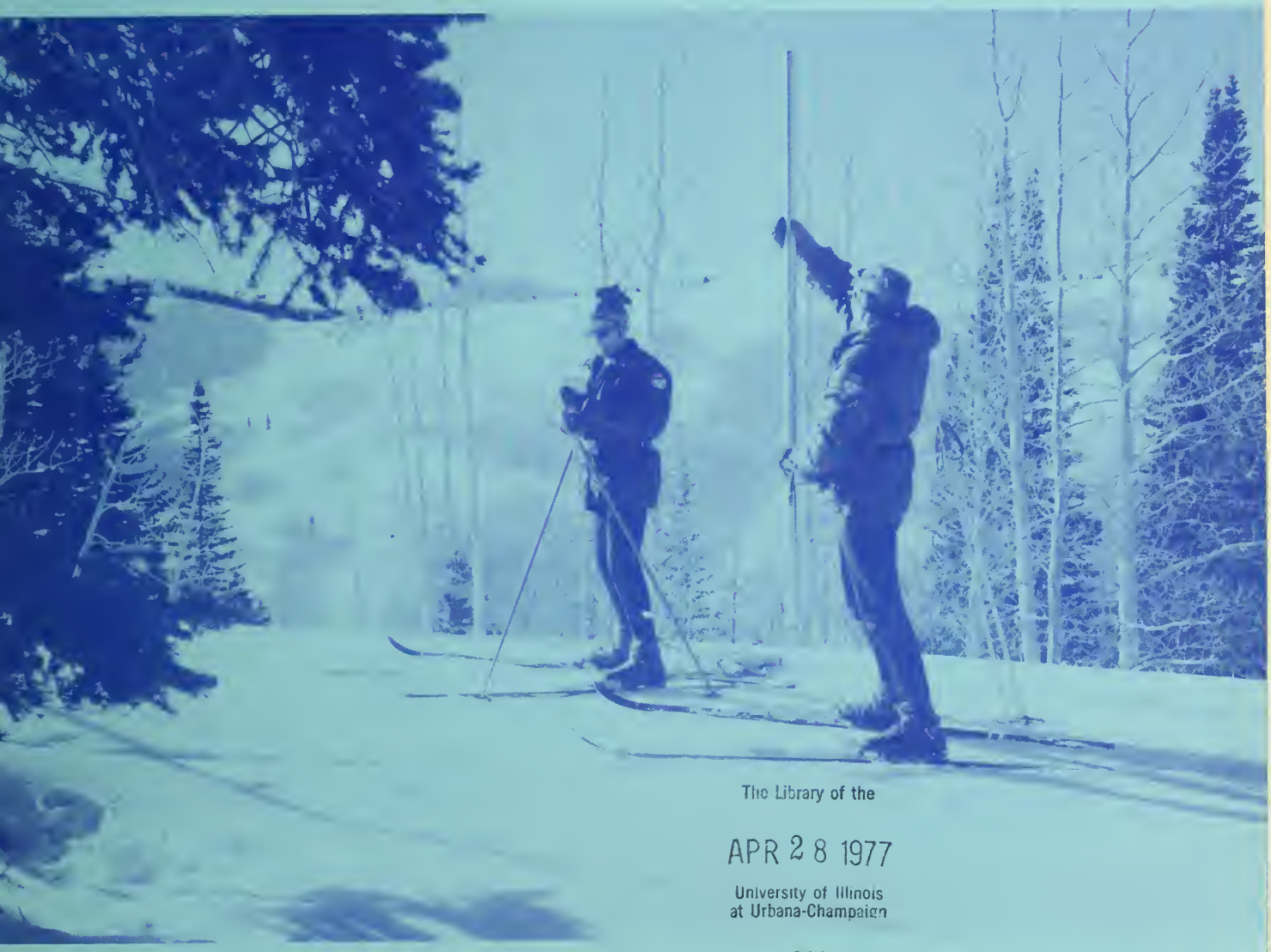
WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO



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Collaborating with
COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
APR. 1, 1977

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW COURSE MEASUREMENTS BY A SURVEY TEAM IN UTAH'S WASATCH RANGE.
ORC-254-10

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, 6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

ROBERT G. HALSTEAD

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

ALBERT W. HAMELSTROM

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN

DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
BERNARD A. SHAFER, Assistant Snow Survey Supervisor
JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Loke County, Upper Arkonsas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Centrol Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfono, Stonewoll, Spanish Peoks, Purgotoire, Bronson Trinchera, Western Baco, Southeastern Baco, Two Buttes, Bent, Timpas, Northeost Prowers, Prowers, Kiowo County, West Otero, Eost Otero, ond Big Sandy Soil Conservotion Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes woter supply conditions in Rio Grande, Center, Conejos, Mosco Hooper, Mt. Blonco, Sanchez, ond Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes wo ter supply conditions in Upper Chamo, East Rio Arriba, Toos, Lindrith, Jemez, Sonto Fe - Pojoaque, Sondoval, Tijeras, Cuba, and Edgewood Soil Conservotion Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes woter supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LoPloto, Pine River, Son Juon, Son Miguel Basin, ond Glade Pork Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, ond Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes woter supply conditions in DeBeque, Ploteau Valley, Lower Grand Volley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Volley, South Side, ond ond Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes woter supply conditions in Yampo, Moffat, West Routt, Eost Routt, North Park, White River, ond Douglos Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Podroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

Severe wind erosion may fill irrigation ditches with soil particles. Ditch cleanout will be important for efficient water delivery.

MEAGER COLORADO SNOWPACK COULD CHANGE CROPPING PATTERNS

STRETCH YOUR IRRIGATION WATER

If your irrigation water supply will be short this year, here are some things you should do:

I. Consider changing to crops which require less water.

Here is a rough comparison of consumptive use by several crops in southeastern Colorado:

Crop	Inches of Water
Spring Grain	18
Dry Beans	20
Grain Sorghum	22
Corn (Grain)	28
Pasture Grasses	32
Sugar Beets	35
Alfalfa	37*

*Although alfalfa will utilize water if available, it will survive with greatly reduced amounts.

II. Irrigate at Critical Periods

The critical (stress) periods for crops are as follows:

Alfalfa - Seedling stage and immediately after cutting.
Small Grain - Boot, bloom and early head stage.
Dry Beans - Early bloom and forming.
Potatoes - Need high soil moisture until potatoes are well-formed.
Corn - Tasseling and silking stage.
Sugar Beets - Seedling stage to maturity, but most critical in seedling stage.
Sorghum - Boot, bloom and milk to dough stages.

III. Do a Good Job of Irrigating

Some of the keys are:

1. Fill root zone early if possible. This is especially true for beets.
2. Measure the amount of water applied.
3. Use alternate row irrigation to increase infiltration.
4. Apply water only when needed based on soil moisture. If soil moisture is checked by the feel method the following guide tells when to irrigate:*

Soil	Feel or Appearance
Coarse Soils (like loamy sand)	Appears to be dry, will not form a ball with pressure.
Light Soils (like sand loam)	Appears to be dry, will not form a ball.
Medium Soils (like loam & silt loam)	Somewhat crumbly but hold together from pressure.
Fine & Very Fine Soils (like clay loam & silty clay loam)	Somewhat pliable, will ball under pressure.

*Potatoes should be irrigated before soil becomes this dry.

5. Use a "cutback" system is possible to improve irrigation efficiency.
6. Check with soil probe or auger to see if water penetration depth is even from one end of field to other.
7. Recover any tailwater and reuse it.

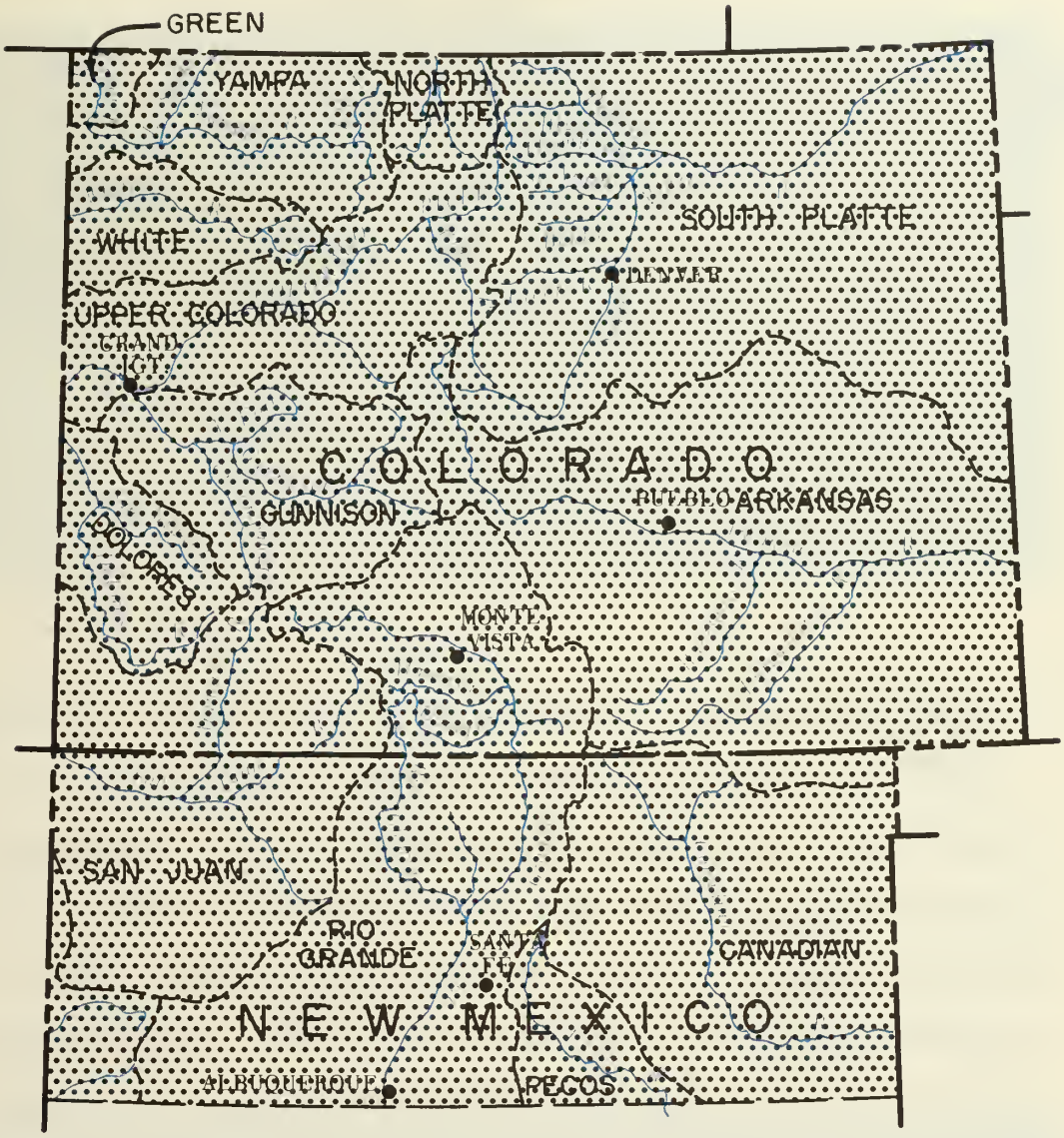
IV. Other Considerations

Plant population can be reduced to save water.
Control weeds.
Use recommended fertilizer amounts - Don't skimp just because water may be in short supply.

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1977



GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
APRIL 1, 1977

DURING THE MONTH OF MARCH THE MOUNTAIN SNOWPACK INCREASED SLIGHTLY AS A PERCENT OF NORMAL OVER MOST OF COLORADO AND REMAINED ABOUT THE SAME AS LAST MONTH IN NEW MEXICO. HOWEVER, APPROXIMATELY HALF OF THE SNOW COURSES MEASURED WERE MINIMUM OF RECORD FOR THIS TIME OF YEAR. THE OUTLOOK FOR WATER SUPPLIES THIS SUMMER REMAINS BLEAK. NEARLY ALL STREAMS IN COLORADO ARE FORECASTED TO FLOW NEAR OR BELOW PREVIOUS MINIMUMS. STREAMS IN NEW MEXICO WILL LIKELY FLOW BELOW AVERAGE BUT SHOULD BE ABOVE PREVIOUS MINIMUMS. WATER CONSERVATION AND RATIONING WILL BE NECESSARY THIS SUMMER.

COLORADO -- STORMS THIS PAST MONTH INCREASED THE SNOWPACK IN THE NORTHERN AND CENTRAL AREAS OF THE STATE BY FIVE TO EIGHTEEN PERCENT BUT IT STILL REMAINS MUCH BELOW NORMAL. THE SOUTHERN PART OF THE STATE INCREASED ONLY THREE TO EIGHT PERCENT OVER LAST MONTH. SOILS REMAIN DRY IN MOST AREAS. IF NORMAL PRECIPITATION IS RECEIVED, FORECASTS ARE FOR FLOWS NEAR THE MINIMUM OF RECORD FOR MOST STREAMS. RESERVOIR STORAGE IS NEAR AVERAGE THROUGHOUT THE STATE EXCEPT FOR THE ARKANSAS AND RIO GRANDE BASINS WHICH ARE WELL BELOW NORMAL.

NEW MEXICO -- THE OUTLOOK FOR WATER SUPPLIES FOR THIS SPRING AND SUMMER REMAINS MUCH THE SAME AS LAST MONTH. FLOWS ARE EXPECTED TO BE BELOW NORMAL ON ALL STREAMS. THE RIO GRANDE AND ITS MAJOR TRIBUTARIES SHOULD FLOW NEAR THE MINIMUM OF RECORD UNLESS MUCH ABOVE NORMAL SPRING AND SUMMER PRECIPITATION IS RECEIVED. THE MOUNTAIN SNOWPACK HAS STARTED ITS MELT IN MOST AREAS AND WILL BE GONE WITHIN THE NEXT MONTH. SOIL MOISTURE REMAINS POOR. CARRYOVER RESERVOIR STORAGE IS SLIGHTLY BELOW NORMAL BUT WILL STILL PROVIDE MUCH NEEDED SUPPLEMENTAL SUPPLY.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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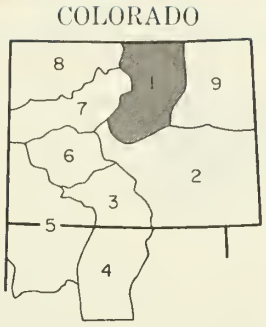

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

DURING MARCH SEVERAL STORMS RESULTED IN IMPROVING THE MOUNTAIN SNOWPACK ABOUT FIVE TO TEN PERCENT OF AVERAGE OVER LAST MONTH. MANY COURSES, HOWEVER, STILL MEASURED THE MINIMUM OF RECORD. MELT WILL SOON START AT THE LOWER ELEVATIONS BUT HIGHER SITES CAN STILL ACCUMULATE UNTIL THE MIDDLE OF MAY. ALL FORECASTS OF STREAMFLOW ARE NEAR THE MINIMUM OF RECORD. SOILS ARE STILL VERY DRY AND RESERVOIR STORAGE IS NINETY PERCENT OF NORMAL.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

RODNEY M. ALT – AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	42	39	107
Boulder Creek at Orodell	22	45	49
Cache La Poudre River at Canyon Mouth (2)	105	43	247
Clear Creek at Golden (3)	50	39	127
St. Vrain Creek at Lyons (4)	28	37	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Poor	Poor
Coal Creek	Poor	Poor
North Fork of South Platte	Poor	Poor
North Fork of Cache La Poudre	Poor	Poor
Ralston Creek	Poor	Poor
Rock Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average *
Big Thompson	5	35	32
Boulder	3	58	48
Cache La Poudre	6	42	43
Clear Creek	6	79	64
Saint Vrain	3	36	29
South Platte	3	40	29

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average*
Antero	33	16	16	14
Barr Lake	32	29	27	25
Black Hollow	8	4	5	4
Boyd Lake	44	34	38	38
Cache La Poudre	10	0	7	8
Carter Lake	109	94	102	95
Chambers Lake	9	1	3	3
Cheesman	79	33	47	59
Cobb Lake	34	5	16	15
Eleven Mile	98	90	97	88
Fossil Creek	12	9	7	8
Gross	43	23	19	28
Halligan	6	3	2	5
Horsetooth	144	90	121	111
Lake Loveland	14	8	10	10
Lone Tree	9	3	5	7
Mariano	5	5	5	5
Marshall	10	4	5	5
Marston	18	17	14	15
Milton	24	19	16	14
Standley	42	30	33	19
Terry	8	6	6	5
Union	13	13	11	10
Windsor	19	10	15	12

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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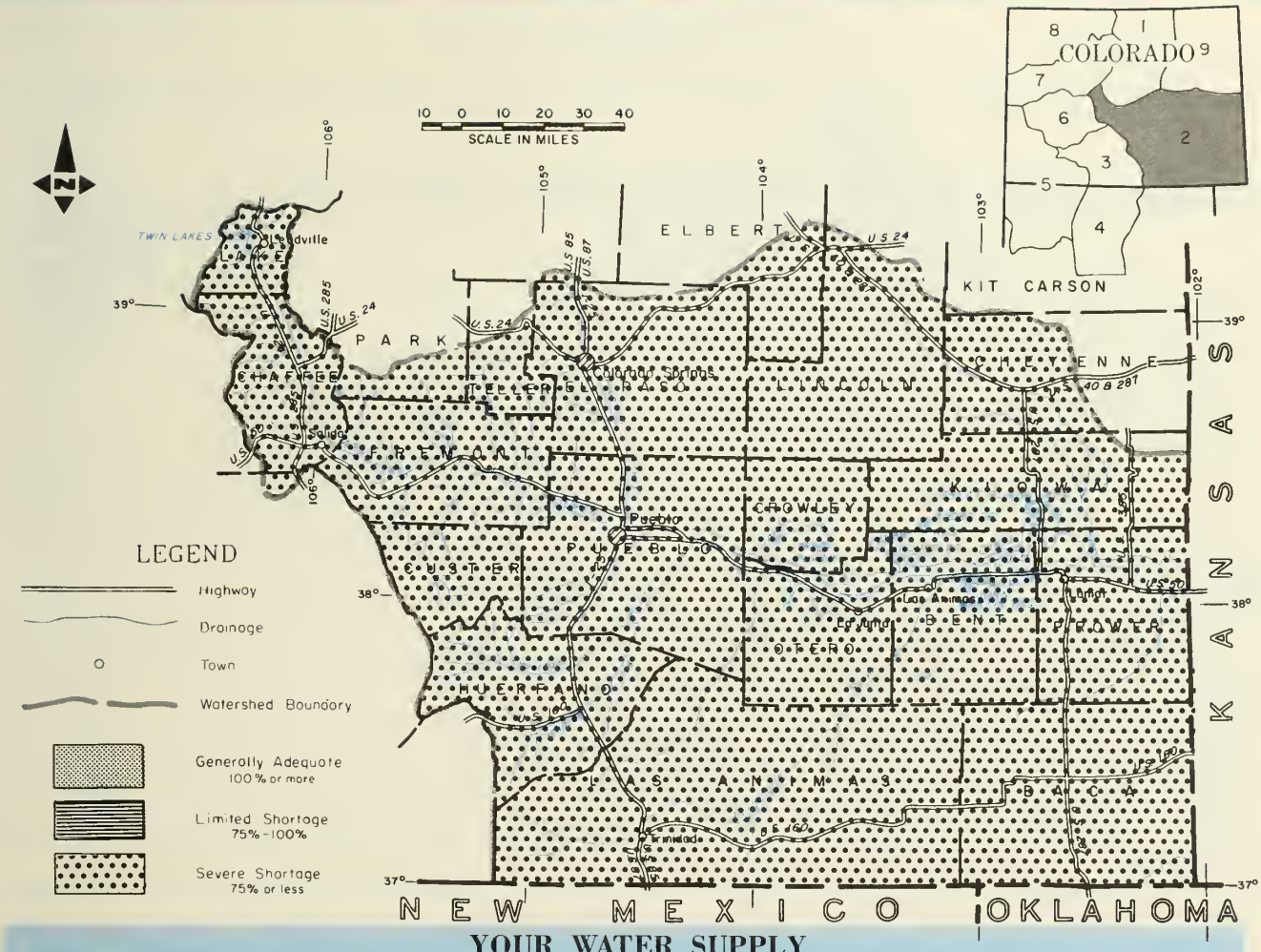

YOUR WATER SUPPLY

MARCH STORMS BROUGHT ONLY A MINIMAL IMPROVEMENT IN THE SNOWPACK ON THE MAINSTEM OF THE ARKANSAS. IT IS ONLY 50 PERCENT OF NORMAL. THE HEADWATERS OF THE CUCHARAS AND PURGATOIRE REMAIN THE HIGHEST AREAS IN THE STATE WITH 80 PERCENT OF AVERAGE. FORECASTS ON THE ARKANSAS INDICATE FLOWS NEAR THE MINIMUM OF RECORD. ONLY EXCEEDINGLY HIGH SPRING AND SUMMER PRECIPITATION COULD IMPROVE THE OUTLOOK. SOILS ARE EXTREMELY DRY.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D. W. GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Arkansas River near Pueblo (1)	100	34	290
Arkansas River at Salida (1)	150	48	313
Cucharas River near La Veta	8	80	10
Huerfano River near Redwing	10	67	15
Purgatoire River at Trinidad	23	61	38

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa River	Fair	Poor
Fountain Creek	Fair	Poor
Grape Creek	Fair	Poor
Hardscrabble Creek	Fair	Poor
Monument Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Arkansas	9	53	51
Cucharas	1	87	91
Purgatoire	1	79	74

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average *
Adobe	62	0	0	17
Clear Creek	11	6	4	8
Cucharas	40	0	–	3
Great Plains	150	0	0	61
Horse Creek	27	10	8	7
John Martin	621	21	10	91
Meredith	42	0	0	14
Model	15	0	0	4
Turquoise	121	26	45	--
Twin Lakes	58	7	17	26

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of
APRIL 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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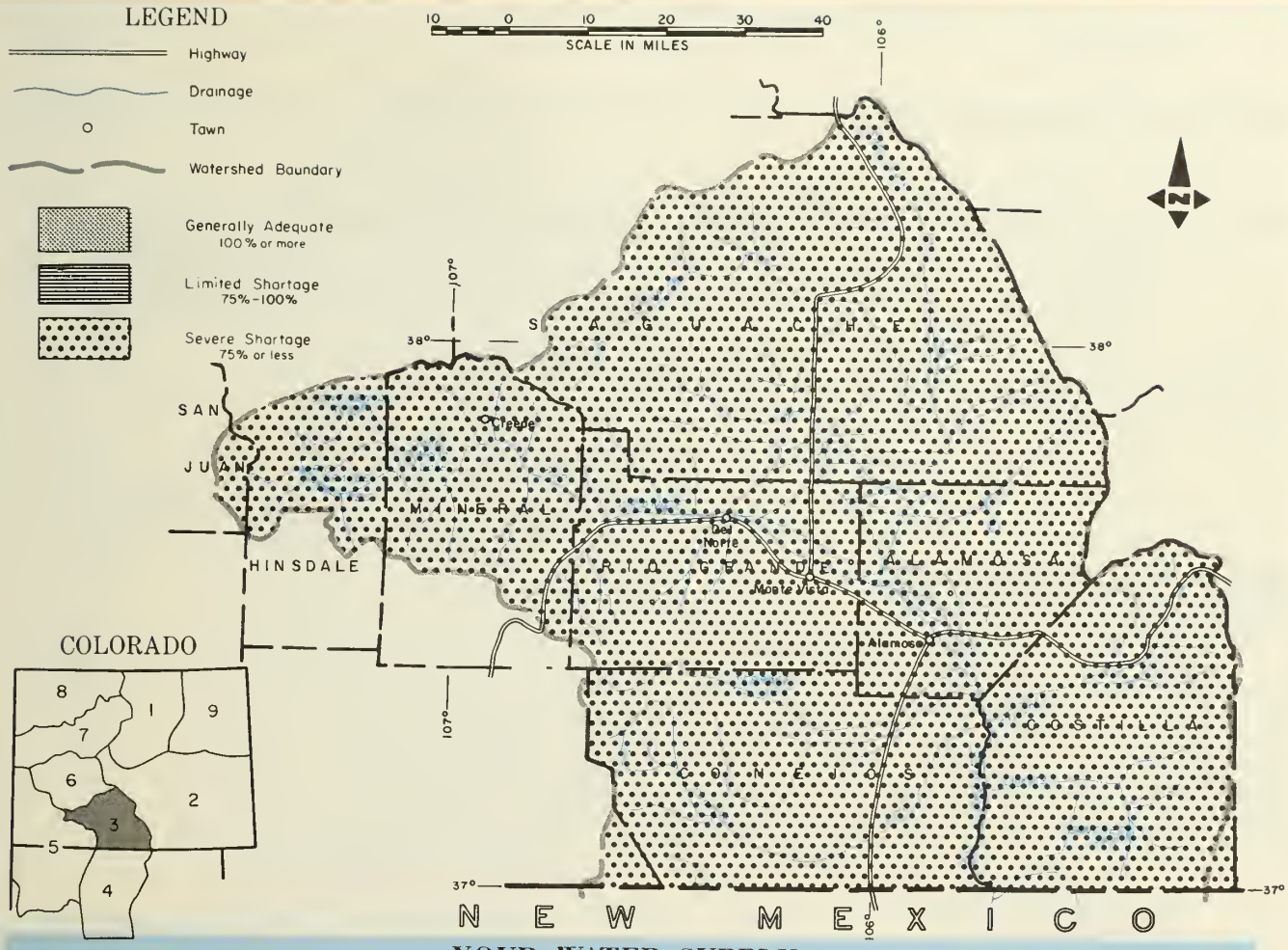

YOUR WATER SUPPLY

THE OUTLOOK FOR SUMMER WATER SUPPLIES REMAINS EXTREMELY POOR. MARCH SAW NO IMPROVEMENT IN THE MOUNTAIN SNOWPACK. MOST WATERSHED SNOWPACKS ARE 70% BELOW NORMAL WITH THE EXCEPTION OF THE CULEBRA. IT IS 25% BELOW NORMAL. PROJECTIONS OF SPRING AND SUMMER STREAMFLOW ARE FOR FLOWS HALF OF NORMAL AND NEAR PREVIOUS MINIMUMS. WATER USERS WITH DIRECT DIVERSIONS WILL SUFFER MOST. DRY SOILS AND POOR CARRYOVER STORAGE MAKE THE SITUATION EVEN MORE SEVERE.

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SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

D. W. GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	* Average
Alamosa Creek above Terrace Reservoir	27	44	62
Conejos River near Mogote (1)	85	46	184
Culebra Creek at San Luis (2)	13	75	17
Rio Grande at 30 Mile Bridge (3)	70	58	121
Rio Grande near Del Norte (3)	230	49	468
South Fork of Rio Grande at South Fork	53	46	115

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Poor	Poor
Sangre de Cristo Cr.	Poor	Poor
Trinchera Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Alamosa	–	–	–
Conejos	3	23	26
Culebra	2	77	75
Rio Grande	10	23	28

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Continental	27	2	5	6
Platoro	60	13	14	9
Rio Grande	46	4	18	18
Sanchez	103	5		14
Santa Maria	45	8	10	7
Terrace	18	4	10	6

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

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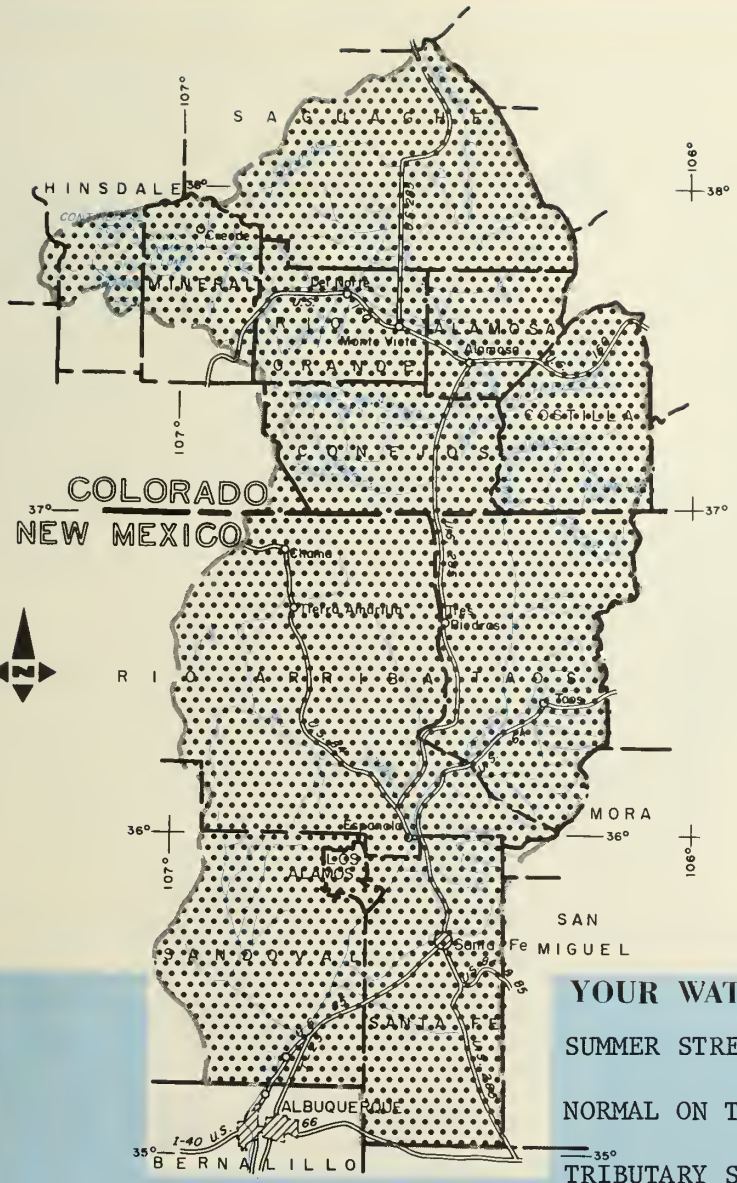

COLORADO

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

SUMMER STREAMFLOW WILL BE MUCH BELOW NORMAL ON THE RIO GRANDE MAINSTEM. TRIBUTARY STREAMS ARE IN SOMEWHAT BETTER SHAPE BUT ARE STILL EXPECTED TO FLOW BELOW AVERAGE AMOUNTS. THE SNOWPACK HAS BEGUN MELTING. HEAVY SPRING RAINS ARE NEEDED TO IMPROVE SOIL MOISTURE WHICH IS POOR IN MOST AREAS.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

A. W. HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

JAMES E. TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) March—July

FORECAST POINT	FORE-CAST	% of Average	Average *
Costilla Creek at Costilla (1)	10	53	19
Jemez River near Jemez	16	55	29
Pecos River at Pecos	35	85	41
Red River at Mouth near Questa	21	71	29
Rio Chama at El Vado	74	39	190
Rio Grande at Otowi (2)	225	39	526
Rio Grande at San Marcial (2)	147	41	355
Rio Hondo near Valdez	6	43	14
Santa Cruz River at Cundiyo	8	62	13

(1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo Creek	Poor	Poor
Mora River	Poor	Poor
Nambe Creek	Poor	Poor
Rio Ojo Caliante	Poor	Poor
Rio Pueblo de Taos	Poor	Poor
Santa Fe Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Pecos	1	667	100
Red River	2	40	57
Rio Chama	3	25	24
Rio Grande, NM	9	62	50
Rio Hondo	1	52	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Avalon	5	4	5	--
Caballo	344	91	44	65
Conchas	273	83	83	184
El Vado	195	111	130	6
Elephant Butte	2195	350	651	394
McMillan	34	14	16	--
Sumner	111	2	2	63

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
APRIL 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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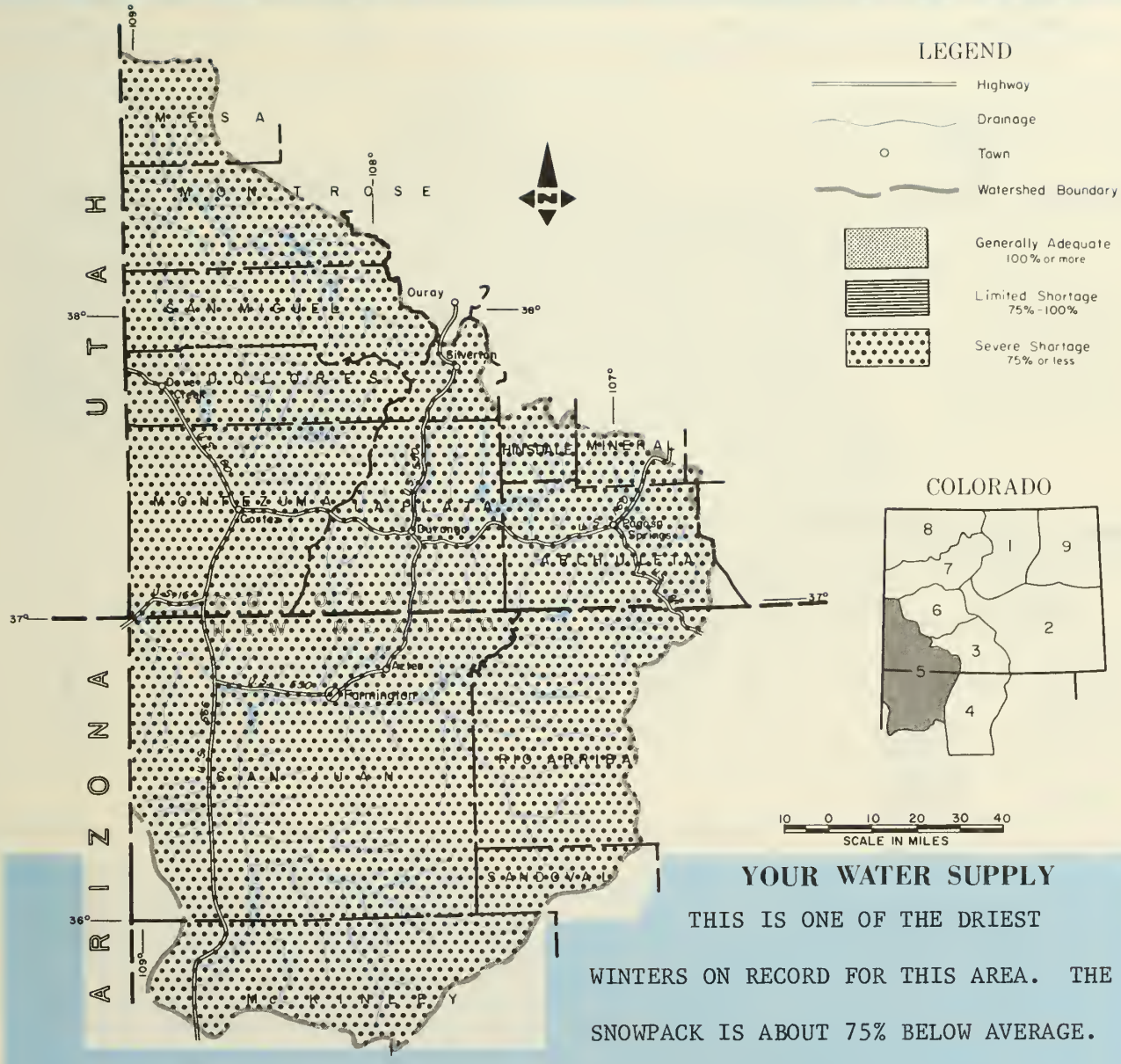

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

THIS IS ONE OF THE DRIEST WINTERS ON RECORD FOR THIS AREA. THE SNOWPACK IS ABOUT 75% BELOW AVERAGE. SOILS ARE EXTREMELY DRY. PROSPECTIVE STREAMFLOW WILL BE LESS THAN HALF OF NORMAL UNLESS HEAVY SPRING AND SUMMER PRECIPITATION IS RECEIVED. SEVERE TO MODERATE SHORTAGES OF WATER ARE ANTICIPATED.

This report prepared by

JACK N. WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

A W HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D W GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Animas River at Durango	165	39	423
Dolores River at Dolores	81	35	232
La Plata River at Hesperus	7	31	24
Los Pinos River at Bayfield (1)	85	43	198
Mancos River near Towac (3)	5	36	14
Inflow to Navajo River (1 & 2)	191	32	597
Piedra Creek at Arboles	70	38	185
San Juan River at Carracas	125	35	354
San Miguel River at Placerville	60	46	130

(1) Observed flow plus change in storage in Vallicito Reservoir. (2) April – July (3) March–July

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida River	Poor	Poor
Hermosa Creek	Poor	Poor
West Dolores River	Poor	Poor
Williams Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Animas	6	28	33
Dolores	4	24	20
San Juan	5	25	30

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Groundhog	22	7	9	10
Jackson Gulch	10	–	6	5
Lemon	40	17	20	20
Navajo	1696	1102	1063	1192
Vallecito	126	48	60	57

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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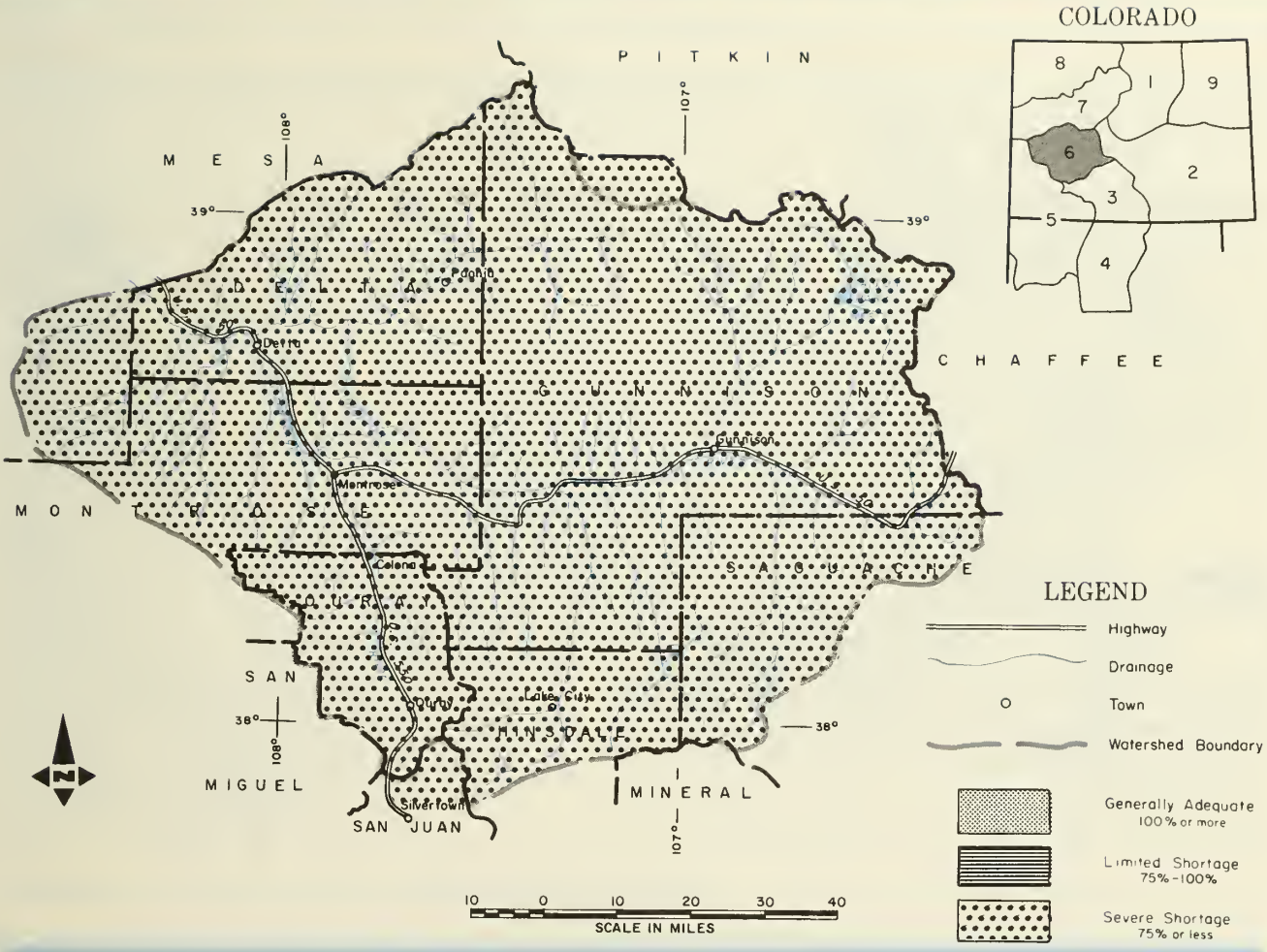

YOUR WATER SUPPLY

STORMS DURING MARCH IMPROVED THE SNOWPACK ONLY ABOUT 5%. IT REMAINS 60% BELOW NORMAL. THIS HAS BEEN ONE OF THE DRIEST WINTERS ON RECORD. STREAMFLOW FORECASTS REFLECT THIS LACK OF SNOW. THE OUTLOOK IS FOR WATER SUPPLIES NEAR THE MINIMUM OF RECORD UNLESS GREATER THAN NORMAL SPRING AND SUMMER RAINFALL IS RECEIVED. SOILS REMAIN DRY. CARRYOVER RESERVOIR STORAGE IS SLIGHTLY ABOVE NORMAL. WATER SHORTAGES FOR ALL USERS CAN BE EXPECTED.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Gunnison River inflow to Blue Mesa Reservoir (1)	310	39	793
Gunnison River near Grand Junction (2)	400	34	1184
North Fork of Gunnison (3)	110	42	263
Surface Creek near Cedaredge	8	50	16
Uncompahgre River at Colona	51	38	134

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ohio Creek	Poor	Poor
Slate River	Poor	Poor
Taylor River	Poor	Poor
Tomichi Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Gunnison	12	42	40
Surface Creek	3	41	37
Uncompahgre	3	42	48

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Blue Mesa	830	380	445	315
Morrow Point	121	115	115	114
Taylor	106	55	60	65

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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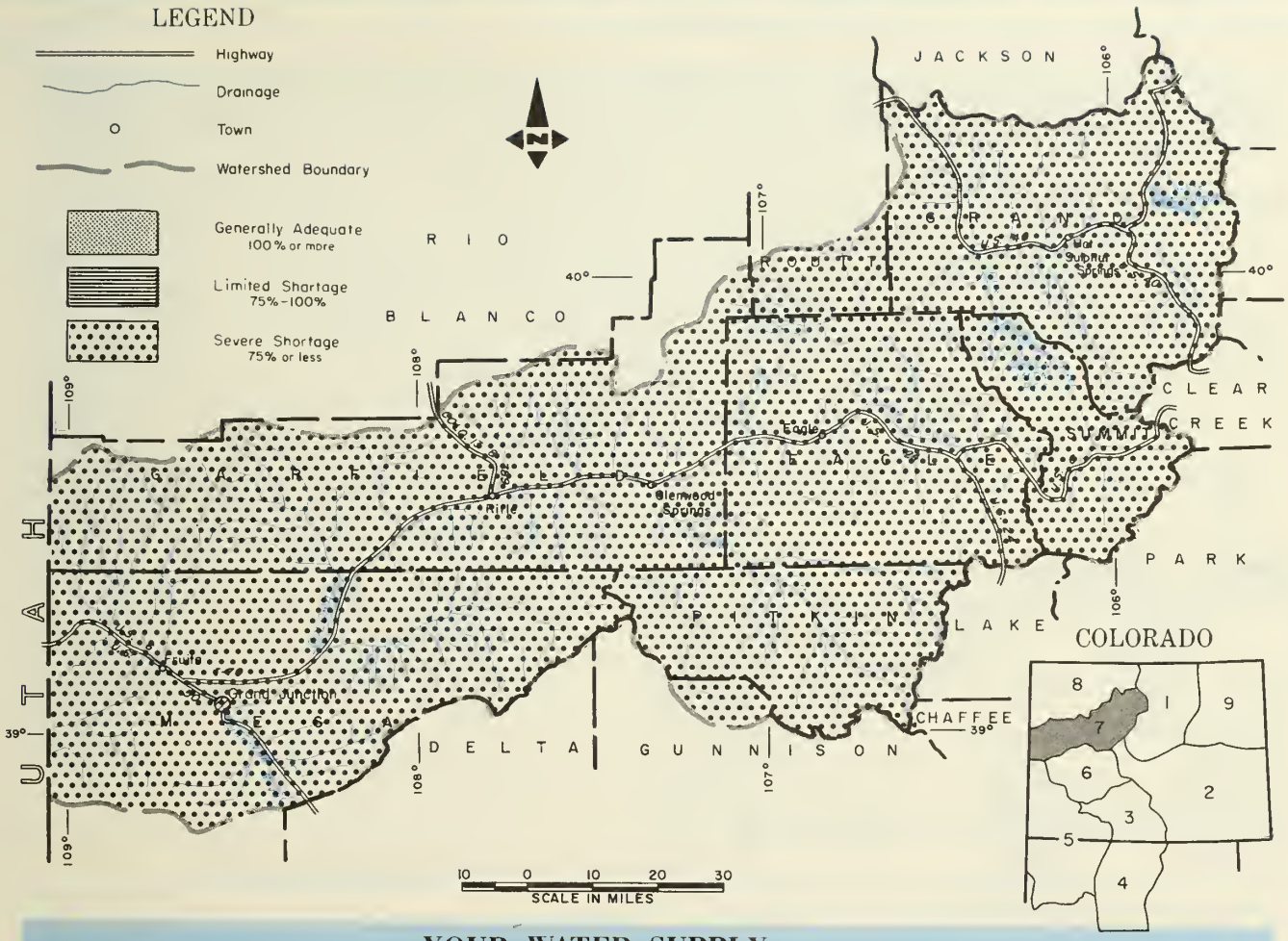

YOUR WATER SUPPLY

SEVERAL STORMS DURING MARCH IMPROVED THE SNOWPACK ABOUT 15% OF AVERAGE COMPARED TO LAST MONTH. THE AMOUNT OF WATER STORED IN THE PACK IS ABOUT HALF OF WHAT SHOULD NORMALLY BE THERE. THIS MEANS WATER SUPPLIES FOR THE FORTHCOMING SUMMER WILL BE IN THE RANGE OF 40 TO 50% OF AVERAGE. THESE FLOWS ARE FORECAST TO BE NEAR THE MINIMUM OF RECORD. SOIL MOISTURE IS STILL DEFICIENT IN THE VALLEYS. CARRYOVER RESERVOIR STORAGE IS SLIGHTLY BELOW AVERAGE.

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SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
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DENVER, COLORADO

DEAN F FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Blue River inflow to Dillon Reservoir	88	52	169
Blue River inflow to Green Mountain Reservoir (1)	130	54	297
Colorado River near Cameo (6)	1090	46	2370
Colorado River near Dotsero (3)	645	45	1434
Colorado River inflow to Granby Reservoir (2)	116	51	228
Roaring Fork at Glenwood Springs (4)	321	45	713
Williams Fork near Parshall (5)	22	35	63
Willow Creek inflow to Willow Creek Reservoir	20	40	47

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Fair	Poor
Eagle River	Fair	Poor
Gypsum Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Blue River	7	63	58
Colorado	19	57	53
Plateau	3	39	37
Roaring Fork	7	53	54
Williams Fork	3	90	67
Willow	2	54	52

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average*
Dillon	254	203	225	231
Granby	466	161	279	213
Green Mountain	139	69	58	54
Homestake	43	20	0	15
Ruedi	101	68	55	59
Vega	32	6	12	12
Williams Fork	97	46	42	25
Willow Creek	9	6	6	6

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

APRIL 1, 1977

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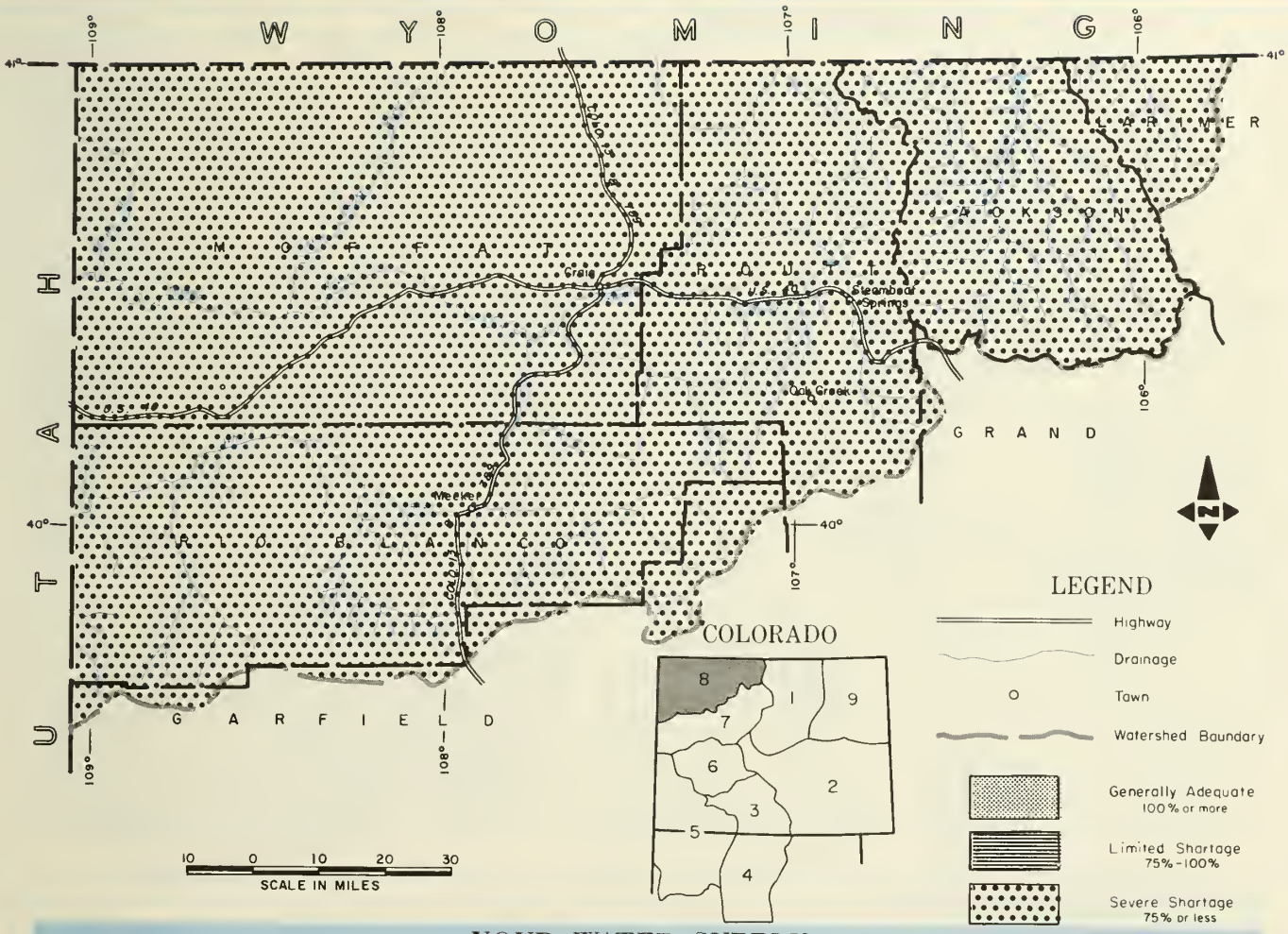

YOUR WATER SUPPLY

A 15% OF NORMAL IMPROVEMENT IN THE SNOWPACK WAS RECORDED DURING MARCH. IT IS NOW ABOUT 55% OF AVERAGE. SNOWFALL CAN STILL INCREASE FOR ANOTHER MONTH AT THE HIGHEST ELEVATIONS BUT VALLEY AND FOOTHILLS REGIONS HAVE COMMENCED MELTING. SUMMER WATER SUPPLIES ARE FORECAST TO BE NEAR HALF OF NORMAL. SOIL MOISTURE GENERALLY REMAINS POOR. HEAVY SPRING RAINS ARE NEEDED TO IMPROVE THE SITUATION.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

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DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Elk River at Clark	120	61	198
Laramie River near Woods	60	47	127
Little Snake River at Lily	135	42	324
North Platte River at Northgate	144	60	240
White River near Meeker	155	52	295
Yampa River near Maybell	450	50	905
Yampa River at Steamboat Springs	321	45	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Fair	Poor
Hunt Creek	Fair	Poor
Illinois River	Fair	Poor
Michigan River	Fair	Poor
Oak Creek	Fair	Poor
Trout Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Elk	2	60	54
Laramie	3	48	51
North Platte	5	60	61
White	2	50	50
Yampa	6	65	57

* 1958-1972 period.

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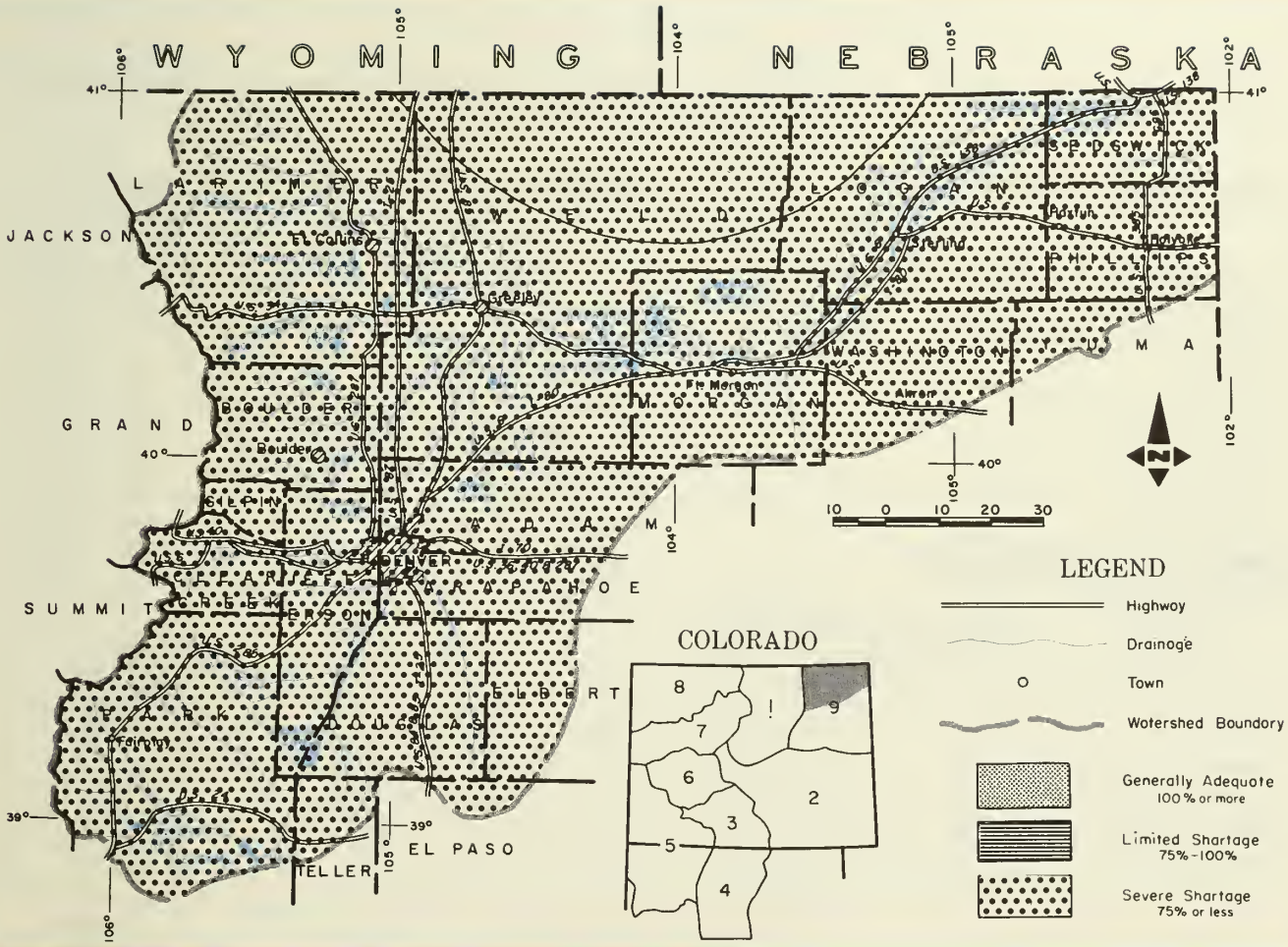
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
APRIL 1, 1977

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES FOR FRONT RANGE STREAMS ARE ANTICIPATED TO BE EXTREMELY LOW. VERY LITTLE IMPROVEMENT WAS NOTED IN THE MOUNTAIN SNOWPACK DURING MARCH. IT IS NOW ABOUT 60% BELOW AVERAGE. THE LOW SNOWPACK COMBINED WITH DEFICIENT SOIL MOISTURE MEANS A WATER-SHORT SUMMER FOR MOST WATER USERS. THE ONLY BRIGHT SPOT IS CARRYOVER RESERVOIR STORAGE WHICH IS NEAR NORMAL.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M. ALT—AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	42	39	107
Boulder Creek at Orodell	22	45	49
Cache La Poudre River at Canyon Mouth (2)	105	43	247
Clear Creek at Golden (3)	50	39	127
Saint Vrain Creek at Lyons (4)	28	37	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Poor	Poor
South Platte from Fort Morgan to Sterling	Poor	Poor
South Platte below Sterling	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average*
Big Thompson	5	35	32
Boulder	3	58	48
Cache La Poudre	6	42	43
Clear Creek	6	79	64
Saint Vrain	3	36	29
South Platte	3	40	29

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average*
Carter	109	94	102	95
Cheesman	79	33	47	59
Eleven Mile	98	90	97	88
Empire	38	34	32	33
Horsetooth	144	90	121	111
Jackson	35	33	32	34
Julesburg	28	21	23	22
Point of Rocks	70	67	69	66
Prewitt	33	28	27	23
Riverside	58	60	58	58

* 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of APRIL 1, 1977

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	AVG 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	3/29	31	7.2	15.3	16.8
McIntyre	3/29	22	5.6	11.3	10.8
Roach	3/29	39	10.5	21.5	18.2
North Platte River					
Cameron Pass	3/31	45	17.6	33.8	28.7
Columbine Lodge	3/31	45	15.0	20.3	24.0
Northgate	3/31	15	3.5	5.6	6.5
Park View	3/30	23	5.9	9.7	9.2
Willow Cr. Pass (B)	3/30	27	7.2	12.2	12.7
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	3/29	14	4.3	5.6	6.8
Boulder Falls	3/29	26	6.7	11.8	13.4
University Camp	3/29	31	7.9	15.0	19.3
Big Thompson River					
Deer Ridge	3/31	0	0.0	4.6	4.8
Hidden Valley	3/31	10	2.5	10.9	10.5
Lake Irene (B)	3/28	38	9.8	19.5	20.9
Long's Peak	3/31	12	3.1	8.9	10.9
Two Mile	3/31	20	4.6	12.8	15.1
Cache La Poudre					
Bennett Creek	3/30	4	1.0	6.7	---
Big South	3/30	0	0.0	0.6	2.1
Cameron Pass	3/31	45	17.6	33.8	28.7
Chambers Lake	3/30	7	2.1	9.9	9.6
Deadman Hill	3/29	31	7.2	15.3	16.8
Hourglass Lake	3/30	10	2.4	7.6	6.7
Joe Wright	3/31	52	16.8	23.4	---
Lost Lake	3/30	20	3.8	11.9	11.8
Red Feather	3/29	8	2.1	7.0	6.9
Clear Creek					
Baltimore (B)	3/29	14	4.3	5.6	6.8
Berthoud Falls	3/29	26	7.2	10.4	13.6
Empire	3/29	18	4.6	6.4	7.8
Grizzly Peak (B)	3/29	40	10.9	15.3	18.9
Loveland Lift	3/29	50	15.6	15.1	21.1
Loveland Pass	3/29	36	11.0	15.1	15.7
St. Vrain River					
Copeland Lake	3/31	2	0.6	3.3	4.4
Ward	3/30	11	2.8	5.1	6.5
Wild Basin	3/31	16	3.1	9.8	11.2
South Platte River					
Como	3/29	7	1.8	6.6	---
Geneva Park	3/28	2	0.3	3.6	3.8
Horseshoe Mt.	3/28	21	4.3	9.6	---
Hoosier Pass	3/30	25	6.8	11.7	12.9
Jefferson Creek	3/29	17	4.8	9.4	9.2
Mosquito	3/28	6	1.1	8.4	---
Trout Creek Pass	3/28	0	0.0	4.7	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	3/29	21	6.3	8.2	6.5
Cooper Hill (B)	NS	--	--	11.1	11.3
East Fork	3/30	22	5.7	9.7	9.8
Four Mile Park	3/30	3	0.6	6.9	5.1
Fremont Pass	3/30	37	10.4	16.9	16.2
Garfield	3/31	21	5.8	10.8	13.0
Hermit Lake	3/31	9	3.4	7.8	---
Monarch Pass	3/31	26	7.5	12.9	17.1
Tennessee Pass	3/30	21	4.4	10.8	10.6
Twin Lakes Tunnel	3/21	16	3.5	10.0	10.7
Westcliffe	3/29	15	4.5	6.4	6.3

NOTE: NS - No Survey
(B) - On Adjacent Drainage

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	AVG 58-72
Cucharas River					
Apishapa	3/30	18	6.5	8.4	---
Cucharas Creek	3/30	23	6.9	10.0	---
La Veta Pass (B)	3/30	23	6.7	7.7	7.4
Purgatoire River					
Bourbon	3/30	19	5.2	6.6	7.0
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	3/30	0	0.0	6.7	5.3
Conejos River					
Cumbres Pass	3/28	23	6.0	18.5	18.0
La Manga	3/28	26	6.8	21.0	---
Platoro	3/30	12	3.6	20.3	16.3
River Springs	3/28	1	0.4	3.8	4.6
Culebra River					
Brown Cabin	3/30	9	2.6	1.6	---
Cottonwood (B)	3/30	5	1.4	---	---
Culebra	3/29	18	5.1	7.7	8.4
La Veta Pass (B)	3/30	23	6.7	7.7	7.4
Trinchera (B)	3/31	18	5.0	7.7	---
Rio Grande					
Cochetopa Pass	3/29	9	2.2	5.0	5.9
Grayback	3/29	17	3.6	20.0	---
Hiway	3/28	22	7.4	29.6	23.8
Lake Humphrey	3/28	4	1.1	9.5	6.1
Love Lake	3/30	13	2.1	12.1	---
Pass Creek	3/28	8	2.4	15.9	9.8
Pool Table	3/31	13	2.1	5.8	6.1
Porcupine	3/30	10	2.0	10.4	10.5
Santa Maria	3/31	0	0.0	3.2	3.6
Upper Rio Grande	3/31	2	0.7	8.7	7.5
Wolf Creek Pass	3/28	27	8.4	33.2	25.5
Wolf Cr. Summit (B)	3/28	30	9.0	32.0	28.3
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela	3/29	6	2.0	0.3	2.0
Rio Chama					
Bateman	3/31	19	4.9	11.4	11.7
Chama Divide	3/29	0	0.0	0.0	1.7
Chamita	3/29	0	0.0	8.2	7.2
Rio Grande					
Alamitos	3/29	13	5.1	3.9	---
Big Tesuque	3/29	1	0.1	2.8	4.6
Cordova	3/30	21	6.3	8.9	10.1
Elk Cabin	3/28	7	1.5	1.1	2.5
Hopewell	3/29	22	6.5	19.7	---
La Cueva	3/29	9	3.6	1.8	---
Palo	3/28	12	3.8	8.0	---
Payrole	3/29	0	0.0	6.0	6.8
Quemazon	3/30	19	5.0	5.7	9.0
Rio En Medio	3/30	14	4.4	6.8	7.4
Sandoval	3/29	13	3.8	2.1	4.2
Senorita Divide	3/31	4	1.3	1.1	---
Taos Canyon	3/28	11	3.0	4.9	3.9
Tres Ritos	3/29	7	2.4	4.6	4.8
North Costilla	3/30	16	3.8	---	---
Powderhouse	3/30	7	1.6	---	---
Bernal Trail	3/28	17	4.2	---	---
Rio Hondo					
Taos Powderhorn	3/28	45	15.5	29.7	---
Red River					
Hematite Park (B)	3/30	8	2.2	4.3	3.5
Red River	3/30	9	3.0	8.8	5.6
Red River #2	3/30	10	3.2	8.0	---

GPO 840-136

APPENDIX I

SNOW COURSE MEASUREMENTS as of APRIL 1, 1977

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	3/30	4	1.6	15.1	10.2
Lemon	3/29	0	0.0	8.7	---
Mineral Creek	3/30	20	5.6	15.8	15.4
Molas Lake	3/30	7	1.8	14.6	12.6
Purgatory	3/31	20	5.2	23.6	---
Red Mt. Pass (B)	3/30	48	13.7	32.8	31.5
Silverton Sub-Sta.	3/30	0	0.0	9.8	5.2
Spud Mountain	3/30	15	5.0	26.9	23.1
Dolores River					
Lizard Head	3/30	16	4.1	17.8	17.2
Lone Cone	3/30	23	6.6	20.6	---
Ophir Loop	3/29	29	7.7	12.0	---
Rico	3/30	0	0.0	4.6	6.1
Telluride	3/29	5	1.4	8.0	6.5
Trout Lake	3/29	20	5.1	14.7	13.7
San Juan River					
Chama Divide (B)	3/29	0	0.0	0.0	1.7
Chamita (B)	3/29	0	0.0	8.2	7.2
Upper San Juan	3/28	31	9.9	34.2	28.6
Wolf Cr. Pass (B)	3/28	27	8.4	33.2	25.5
Wolf Cr. Summit	3/28	30	9.0	32.0	28.3
GUNNISON BASIN					
Gunnison River					
Alexander Lake	3/30	31	8.5	21.1	22.8
Blue Mesa	3/31	14	3.9	8.1	7.2
Butte	3/30	22	5.5	14.0	---
Cochetopa Pass (B)	3/29	9	2.2	5.0	5.9
Crested Butte	3/30	20	6.3	14.2	13.0
Keystone	3/28	29	8.1	19.5	20.0
Lake City	3/28	9	2.1	7.0	8.0
Mesa Lakes (B)	3/25	30	7.0	15.3	17.6
McClure Pass	3/30	22	7.9	16.9	15.1
Park Cone	3/29	10	2.2	11.3	10.6
Park Reservoir	3/30	32	8.5	22.5	23.8
Porphyry Creek	3/31	29	8.0	14.1	16.9
Tomichi	3/31	19	5.3	10.5	12.6
Surface Creek					
Alexander Lake	3/30	31	8.5	21.1	22.8
Mesa Lakes	3/25	30	7.0	15.3	17.6
Park Reservoir	3/30	32	8.5	22.5	23.8
Uncompahgre River					
Ironton Park	3/31	26	8.2	14.3	10.2
Red Mountain Pass	3/30	48	13.7	32.8	31.5
Telluride (B)	3/29	5	1.4	8.0	6.5
COLORADO BASIN					
Blue River					
Blue River	3/30	17	5.1	8.0	8.5
Fremont Pass	3/30	37	10.4	16.9	16.2
Frisco Pass	Discontinued			6.8	7.4
Grizzly Peak	3/29	40	10.9	15.3	18.9
Hoosier Pass (B)	3/30	25	6.8	11.7	12.9
Shrine Pass	3/30	40	10.7	16.7	18.1
Snake River	3/29	14	3.6	7.0	7.9
Summit Ranch	3/29	20	4.4	6.6	7.1

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
Colorado River					
Arrow	3/30	33	7.8	13.9	13.2
Berthoud Pass	3/30	42	9.9	14.0	15.9
Berthoud Summit	3/29	45	13.8	16.1	19.7
Cooper Hill	NS	--	--	11.1	11.3
Fiddler Gulch	NS	--	--	13.5	14.5
Glenmar Ranch	3/30	24	6.5	8.8	8.5
Gore Pass	3/29	20	4.9	11.5	10.2
Grand Lake	3/28	18	4.5	8.0	8.2
Lake Irene	3/28	38	9.8	19.5	20.9
Lapland	3/28	18	4.1	8.0	10.4
Lulu	3/30	39	10.4	19.4	18.7
Lynx Pass	3/29	26	6.0	13.8	12.8
McKenzie Gulch	3/29	10	2.4	6.8	5.0
Middle Fork	3/30	24	6.3	8.7	9.9
Milner	3/28	24	6.4	11.3	13.6
North Inlet	3/30	15	3.9	7.2	8.7
Pando	3/30	18	4.2	9.7	10.3
Phantom Valley	3/29	17	4.5	8.3	10.8
Ranch Creek	3/30	23	4.8	8.6	9.9
Tennessee Pass (B)	3/30	21	4.4	10.8	10.6
Vasquez	3/29	29	8.2	11.7	12.9
Roaring Fork					
Aspen	3/29	45	12.0	18.7	17.1
Independence Pass	3/21	36	9.1	15.0	17.5
Ivanhoe	3/31	35	9.6	18.1	18.1
Kiln	3/28	27	6.2	13.7	---
Lift	3/29	39	10.2	17.0	17.8
McClure Pass	3/30	22	7.9	16.9	15.1
Nast	3/28	9	2.1	6.5	5.6
North Lost Trail	3/30	18	6.2	16.3	14.6
Williams Fork River					
Glenmar Ranch	3/30	24	6.5	8.8	8.5
Jones Pass	3/31	37	10.1	14.0	15.5
Middle Fork	3/30	24	6.3	8.7	9.9
Willow Creek					
Granby	3/30	15	3.4	7.3	7.5
Willow Cr. Pass	3/30	27	7.2	12.2	12.7
Plateau Creek					
Mesa Lakes	3/25	30	7.0	15.3	17.6
Park Reservoir	3/30	32	8.5	22.5	23.8
Trickle Divide	3/30	37	9.2	25.0	25.9
YAMPA BASIN					
Elk River					
Elk River	3/29	36	9.4	15.4	17.8
Hahn's Peak	3/28	28	7.6	12.7	13.7
White River					
Burro Mountain	3/28	38	9.5	19.1	17.2
Rio Blanco	3/29	28	6.9	13.9	15.7
Yampa River					
Bear River	3/30	24	4.9	11.6	11.2
Columbine (B)	3/31	45	15.0	20.3	24.0
Crosho	3/30	34	8.2	13.4	---
Dry Lake	3/29	39	11.1	17.0	20.0
Lynx Pass (B)	3/29	26	6.0	13.8	12.8
Rabbit Ears	3/31	47	13.9	19.4	25.9
Tower	3/29	86	25.4	40.2	---
Yampa View	3/31	32	9.7	12.6	14.6

NOTE: NS - No Survey
(B) - On Adjacent Drainage

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

SPECIAL MEASUREMENTS
JANUARY 1, MAY 15
and JUNE 1, 1977

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW COURSE MEASUREMENTS BY A SURVEY TEAM IN IDAHO'S WASATCH RANGE.
ORC-254-10

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, 6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include o report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OR 1976

COLORADO SNOW COURSE LOCATIONS

FOR

SPECIAL MEASUREMENTS

SNOTEL SITES IN COLORADO

SNOTEL is an automatic data telemetered program started in 1975. Starting January 1, 1977, these sites reported data on snow water content, precipitation, and temperature at least once a day. More frequent readings can be made if desired.

The SNOTEL sites activated this year are listed below:

Arrow	Columbine	Mineral Creek	Upper San Juan
Berthoud Summit	Deadman	Porphyry	Willow Creek
Cascade	Joe Wright	Tower	

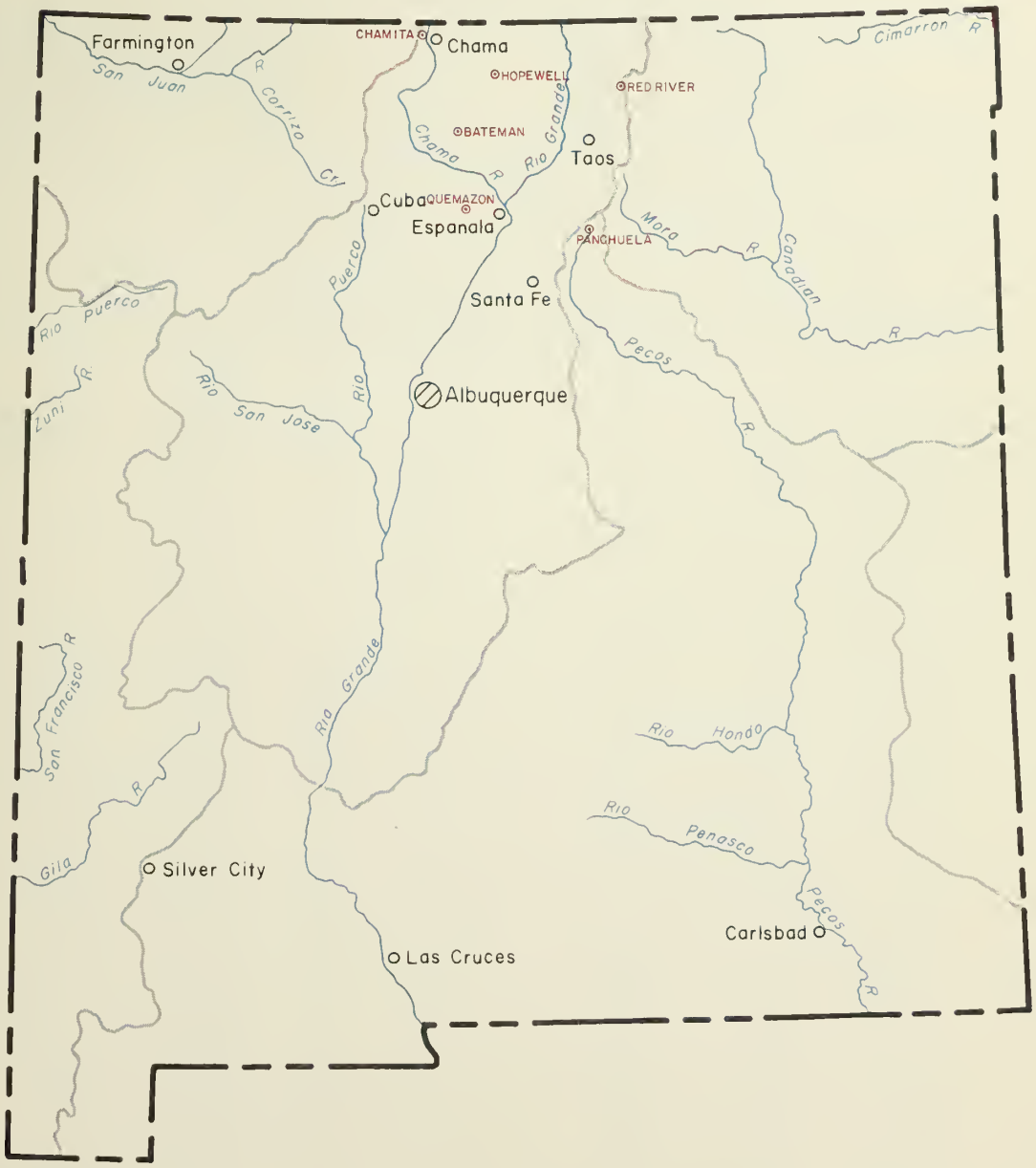
Other sites installed but not yet radio-equipped:

Burro Mountain Culebra Fremont Pass Park Reservoir Santa Maria

NEW MEXICO SNOW COURSE LOCATIONS

FOR

SPECIAL MEASUREMENTS



SNOTEL SITES IN NEW MEXICO

Active in December 1976:

- Bateman
- Hopewell
- Red River

Installed but not active until Fall of 1977:

- Chamita
- Panchuela
- Quemazon

M7-OL-22022J

EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1977

WATER SUPPLY OUTLOOK

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
P.O. Box 17107
Denver, Colorado 80217

Report Prepared By
Jack N. Washichek and
Bernard A. Shafer
Soil Conservation Service

Snow Courses	Current Information			Past Record Water Content in Inches		
	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1 1958-72 Average	Jan. 1 Last Year	Feb. 1 1958-72 Average
**Arrow	12/29	13	1.4	---	4.3	---
**Berthoud Summit	12/28	21	4.2	7.8	6.6	11.4
**Burro Mountain	12/28	10	1.5	---	---	11.5
Cameron Pass	12/29	18	5.2	10.7*	10.7	16.5
**Cascade	12/29	0	0.0	---	7.2	8.0
**Columbine Lodge	12/30	16	2.9	8.6	7.3	14.3
**Culebra #1	12/30	9	1.6	---	---	5.6
Culebra #2	12/29	10	1.6	---	---	---
**Deadman Hill	No Survey		---	---	---	10.4
Dry Lake	12/29	13	2.3	8.5*	---	12.0
**Fremont Pass	12/28	16	2.8	6.0	7.4	9.8
**Joe Wright	12/29	24	5.1	---	8.8	16.1*
McClure Pass #1	12/29	6	0.7	---	5.8	11.1
McClure Pass #2	12/29	9	1.0	---	4.8	11.0*
Mesa Lakes	12/30	4	0.6	7.4	5.7	10.5
**Mineral Creek	12/29	5	0.8	---	5.9	9.9
Ophir Loop	12/30	19	2.3	---	5.1	---
**Park Reservoir	12/28	8	0.8	---	---	14.6
**Porphyry Creek	12/28	10	1.6	7.1	5.6	10.0
Rabbit Ears	12/30	15	2.7	11.9*	8.5	16.1
Red Mountain	12/29	15	2.8	13.6	13.4	19.0
**Santa Maria	12/28	0	0.0	---	---	3.3
Spud Mountain	12/29	0	0.0	10.5	10.2	15.2
Tennessee Pass	12/28	12	1.8	4.3	3.4	6.5
**Tower	12/29	27	5.3	20.9*	16.4	34.0*
Two Mile	12/30	5	1.0	6.3	5.0	8.6
University Camp	12/29	14	2.5	6.8	5.0	10.9
**Upper San Juan	1/03	19	1.9	14.2	10.9	19.1
Willow Creek Pass	12/29	9	1.5	---	5.0	7.7
Wolf Creek Pass	1/03	18	2.1	13.5	9.4	17.4
Wolf Creek Summit	1/03	15	2.3	14.5	10.5	18.5

*Less than 10 years of record.
**Indicates automatic sensors (SNOTEL Program).

(OVER)

EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1977

WATER SUPPLY OUTLOOK

January 1 snowpack is one of the lowest on record. Only the 1962 snowpack is close to current data.

This has created many problems already. Ski areas have been very late in opening and as of this writing still have poor conditions.

Soils have frozen very deep because of lack of insulating snowpack.

What little snow there is, is highly crystalline which will create some avalanche problems later.

There is still considerable time to develop enough snow to satify summer water demands, but each day reduces this chance. About 40% of the annual snow should have fallen by now.

Average snowpack for the entire state is only 31% of normal. The Colorado Basin is especially low. Front Range snowpack varies from 45% on the Arkansas to 35% on the South Platte streams.

The Colorado River snow courses are 23% of the 1958-72 average or even lower.

Only a selected few snow courses were read January 1. Most of the state's snow courses will be read February 1.

EARLY SEASON SNOW REPORT FOR NEW MEXICO

January 1, 1977

WATER SUPPLY OUTLOOK

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
P.O. Box 17107
Denver, CO 80217

Report Prepared By
Jack N. Washichek and
Bernard A. Shafer
Soil Conservation Service

NEW MEXICO Snow Courses	Current Information			Past Record Water Content in Inches		
	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1 1958-72 Average	Jan. 1 Last Year	Feb. 1 1958-72 Average
**Bateman	12/29	7	1.1	---	4.3	6.4*
**Chamita	12/30	5	0.5	---	---	5.5
**Hopewell	12/30	7	0.6	---	5.8	---
La Cueva	12/29	4	0.7	---	1.5	---
**Panchuela #2	12/29	5	1.6	---	---	2.5
**Quemazon	12/30	6	1.1	---	---	6.1
**Red River #2	12/29	9	2.1	---	5.0	3.7
Sandoval	12/30	5	1.0	---	1.2	3.5

*Less than 10 years of record.
**Indicates automatic sensors (SNOTEL Program).

The snowpack in New Mexico is not normally read this early in the snow year.

An automatic system to read hydrologic conditions daily was initiated last year.

This year these sites were checked.

Current snowpack is extremely low. Many of the state's snow courses are only 50% of last year or even less.

The late opening of ski areas has reduced winter activities in the state.

Some time still remains to build a snowpack that will provide water for summer demands, however, future snow will have to be much above normal.

MAY 15, 1977

WATER SUPPLY OUTLOOK

USDA Soil Conservation Service
Report Released By
Robert G. Halstead, State Conservationist
P.O. Box 17107
Denver, Colorado 80217

Snow Course	Current Information				Past Record Water Content (Inches)		
	Date of Survey	Snow Depth Inches	Water Content Inches	% of 1958-72 Average	May 15 1958-72 Average	May 15 Last Year	May 1 This Year
Berthoud Summit	5/12	25	9.4	46	20.4	16.2	14.7
Burro Mountain	5/13	0	0.0	--	---	---	3.5
Cameron Pass	5/13	26	12.6	43	29.2	31.5	22.3
Cascade	5/13	0	0.0	--	---	---	0.0
Columbine Lodge	5/13	0	0.0	--	13.2	2.2	4.0
Culebra #1	5/13	0	0.0	--	---	---	3.3
Deadman					---	---	8.6
Fremont Pass	5/12	21	7.7	48	16.2	18.2	12.7
Hiway	5/12	13	4.6	--	---	32.6	8.9
Joe Wright	5/13	30	12.3	44	28.0*	23.2	18.8
McClure Pass	5/13	0	0.0	--	---	0.0	0.0
Mesa Lakes	5/13	0	0.0	--	9.0	11.0	0.6
Milner	No Survey	-	--	--	9.3*	5.7	4.5
Mineral Creek	5/13	0	0.0	--	---	---	0.0
Park Reservoir	5/13	0	0.0	--	---	---	2.6
Park View	5/13	0	0.0	--	2.0	1.4	1.1
Pass Creek	5/12	0	0.0	--	---	0.0	0.0
Porphyry Creek	5/13	0	0.0	--	13.0	14.7	8.2
Rabbit Ears	5/13	3	1.2	4	27.9*	20.6	8.8
Red Mountain	5/13	5	2.0	7	27.8	34.0	13.2
Spud Mountain	5/13	0	0.0	--	17.9	22.9	0.0
Tennessee Pass	5/12	0	0.0	--	2.9*	0.0	0.0
Two Mile	5/16	20	4.2	24	17.8	15.3	6.0
University Camp	5/14	8	2.4	14	16.7	13.4	8.8
Upper San Juan	5/12	0	0.0	--	15.3	18.8	1.5
Willow Creek Pass	5/13	0	0.0	--	5.9	5.5	2.9
Wolf Creek Pass	5/12	0	0.0	--	13.3	18.6	2.4
Wolf Creek Summit	5/12	19	6.4	22	29.0	37.5	11.2

*Less than 10 years of record.

(OVER)

MAY 15, 1977

WATER SUPPLY OUTLOOK

Streams are still very low and all but the very highest snowpack has melted. Some of the snowpack was used to fill the dry mountain soils.

Severl highway passes were closed due to snow falling May 13-14. Any additional snow helps, however this snowfall was not sufficient to improve conditions to any great extent. Rainfall has been spotty.

Streamflows are still forecast much below normal and most are near or less than the minimum of record.

All possible efforts should be expended to conserve water.

Field offices of the Soil Conservation Service and extension service can be contacted to provide assistance.

JUNE 1, 1977

WATER SUPPLY OUTLOOK

USDA Soil Conservation Service
Report Released By
Robert G. Halstead, State Conservationist
P.O. Box 17107
Denver, Colorado 80217

	Current Information				Past Record Water Content (Inches)		
Snow Course	Date of Survey	Snow Depth Inches	Water Content Inches	% of 1958-72 Average	June 1 1958-72 Average	June 1 Last Year	May 15 This Year
Berthoud Summit	5/26	17	6.2	51	12.1	11.2	9.4
Cameron Pass	5/27	24	10.7	49	21.9	26.2	12.6
Columbine Lodge	5/27	0	0.0	--	1.5	0.0	0.0
Deadman	5/27	5	2.1	--	---	---	---
Fremont Pass	5/26	9	3.6	42	8.6	13.8	7.7
Joe Wright	5/27	22	8.2	--	---	18.0	12.3
Mesa Lakes	5/31	0	0.0	--	1.4	2.3	0.0
Milner Pass	5/31	0	0.0	--	---	0.0	1.9
Park Reservoir	5/31	0	0.0	--	---	---	0.0
Park View	5/27	0	0.0	--	0.1	0.0	0.0
Porphyry Creek	5/31	0	0.0	--	4.8	4.4	0.0
Rabbit Ears	5/27	0	0.0	--	---	10.1	1.2
Red Mountain	5/31	0	0.0	--	12.8	21.2	2.0
Spud Mountain	5/31	0	0.0	--	9.5	12.6	0.0
Tennessee Pass	5/26	0	0.0	--	0.0	0.0	0.0
Two Mile	5/31	4	2.2	15	14.2	11.6	4.2
University Camp	5/29	2	0.3	3	9.1	5.9	2.4
Upper San Juan	5/31	0	0.0	--	4.5	4.2	0.0
Willow Creek Pass	5/27	0	0.0	--	0.9	0.0	0.0
Wolf Creek Pass	5/31	0	0.0	--	3.5	4.8	0.0
Wolf Creek Summit	5/27	23	7.8	38	20.6	32.8	6.4

All but the very high elevation snow fields have melted. Rivers never were very high. Many, if not all, have peaked and are starting down. Although streamflow forecasts were the minimum of record, the forecasts may still be too high. This may be by far the lowest streamflow year on record. Summer rains are badly needed to produce crops this season.

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

- Colorado State Engineer
- New Mexico State Engineer
- Nebraska State Engineer
- Colorado State University Experiment Station
- Rocky Mountain Forest and Range Experiment Station

FEDERAL

- Department of Agriculture
  - Forest Service
  - Soil Conservation Service
- Department of Interior
  - Bureau of Reclamation
  - Geological Survey
  - National Park Service
  - Indian Service
- Department of Commerce
  - NOAA, National Weather Service
- Defence Department
  - Army Engineer Corps
- Atomic Energy Commission

INVESTOR OWNED UTILITIES

- Colorado Public Service Company
- Public Service Company of New Mexico

MUNICIPALITIES

- City of Denver
- City of Boulder
- City of Greeley
- City of Fort Collins

WATER USERS ORGANIZATIONS

- Arkansas Valley Ditch Association
- Colorado River Water Conservation District

IRRIGATION PROJECTS

- Farmers Reservoir and Irrigation Company
- San Luis Valley Irrigation District
- Santa Maria Reservoir Company
- Costilla Land Company
- Uncompahgre Valley Water Users' Association
- Twin Lakes Reservoir and Canal Company
- Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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Early Season Snow Report For Colorado

JANUARY 1, 1978

WATER SUPPLY OUTLOOK

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at Urbana-Champaign
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USDA Soil Conservation Service
Report Released By
Robert G. Halstead, State Conservationist
P.O. Box 17107
Denver, Colorado 80217

Snow Course	Current Information				Past Record Water Content (Inches)		
	Date of Survey	Snow Depth Inches	Water Content Inches	% of 1958-72 Average	Jan. 1 1958-72 Average	Jan. 1 Last Year	Feb. 1 1958-72 Average
Arrow	12/28	28	6.7	---	---	1.4	---
Berthoud Summit	12/29	43	12.0	154	7.8	4.2	11.4
Boulder Falls	12/28	34	8.3	---	---	---	7.1
Cameron Pass	12/29	40	12.6	118	10.7*	5.2	16.5
Cascade	12/29	14	2.6	---	---	0.0	8.0
Columbine Lodge	12/30	61	17.1	199	8.6	2.9	14.3
Deadman Hill	12/29	31	8.3	---	---	---	10.4
Dry Lake	12/29	45	12.3	145	8.5*	2.3	12.0
Fremont Pass	12/29	41	10.2	170	6.0	2.8	9.8
Hiway	12/29	21	5.1	---	---	---	15.6
Joe Wright	12/29	45	14.1	---	---	5.1	16.1*
McClure Pass #2	12/28	23	4.9	---	---	1.0	11.0*
Mesa Lakes	12/23	19	4.0	54	7.4	0.6	10.5
Mineral Creek	12/29	27	6.6	---	---	0.8	9.9
Park Reservoir	12/27	33	7.4	---	---	0.8	14.6
Pass Creek	12/29	12	2.6	---	---	---	8.2
Porphyry Creek	12/30	33	8.3	117	7.1	1.6	10.0
Rabbit Ears	12/30	55	14.7	124	11.9*	2.7	16.1
Red Mountain	12/29	50	13.2	97	13.6	2.8	19.0
Spud Mountain	12/29	27	6.1	58	10.5	0.0	15.2
Tennessee Pass	12/29	27	6.3	147	4.3	1.8	6.5
Tower	12/29	113	33.3	159	20.9*	5.3	34.0*
Two Mile	1/01	42	10.2	162	6.3	1.0	8.6
University Camp	12/28	48	12.8	188	6.8	2.5	10.9
Upper San Juan	12/29	31	7.0	49	14.2	1.9	19.1
Willow Creek Pass	12/29	26	6.4	---	---	1.5	7.7
Wolf Creek Pass	12/29	28	6.5	48	13.5	2.1	17.4
Wolf Creek Summit	12/29	25	5.8	40	14.5	2.3	18.5

*Less than 10 years of record.

(OVER)

EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1978

WATER SUPPLY OUTLOOK

Colorado snowpack varies greatly as indicated by the first snow surveys of the year.

Central Colorado from Fremont Pass to the Wyoming border has an excellent snowpack while the southern part of the state is much below normal. However, even the light snowfall in southern Colorado is much better than last year at this time.

Only a limited number of snow courses are read January 1, so it is difficult to estimate the entire snowpack. If the snowpack in the northern half of the state continues to build at the current rate it would help alleviate the effects of last year's drought.

The southern portion of the state still needs additional snow.

Early Season Snow Report For New Mexico

JANUARY 1, 1978

WATER SUPPLY OUTLOOK

USDA Soil Conservation Service
Report Released By
A. W. Hamelstrom, State Conservationist
P.O. Box 2007
Albuquerque, New Mexico 87103

Snow Course	Current Information				Past Record Water Content (Inches)		
	Date of Survey	Snow Depth Inches	Water Content Inches	% of 1958-72 Average	Jan. 1 1958-72 Average	Jan. 1 Last Year	Feb. 1 1958-72 Average
Bateman				---	---	1.1	6.4*
Chamita				---	---	0.5	5.5
Hopewell	12/28	18	4.3	---	---	0.6	---
North Costilla	12/30	12	3.2	---	---	---	---
Panchuela #1	12/30	3	0.8	---	---	---	2.5
Quemazon	12/29	10	2.3	---	---	1.1	6.1
Red River #2	12/29	12	2.6	---	---	2.1	3.7

*Less than 10 years of record.

Early snow course measurements have not been made in the past in New Mexico. Several snow courses are now automated and early season readings will become available.

The few snow courses read would indicate the snowpack is considerably better than last year at this time. Hopewell Lake snow course indicates 4.3 inches of water compared to only 0.6 inches last year.

If the snow for the remainder of the year increases at this rate, New Mexico should have at least an average water supply this year.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
FEB. 1, 1978

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

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COVER PHOTO: SOME OF THE DATA IN THIS REPORT HAVE BEEN RECEIVED THROUGH THE SOIL CONSERVATION SERVICE'S NEW SNOTEL SYSTEM WHICH TRANSMITS INFORMATION VIA THE SPACE AGED METEOR BURST METHOD FROM DATA SITES TO MASTER STATIONS LIKE THESE.

PUBLISHED BY SOIL CONSERVATION SERVICE

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Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.

USDA-SCS-PORTLAND OR 1977

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

ROBERT G. HALSTEAD

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

ALBERT W. HAMELSTROM

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN

DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
BERNARD A. SHAFER, Assistant Snow Survey Supervisor
JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATERSHED II -ARKANSAS RIVER WATERSHED

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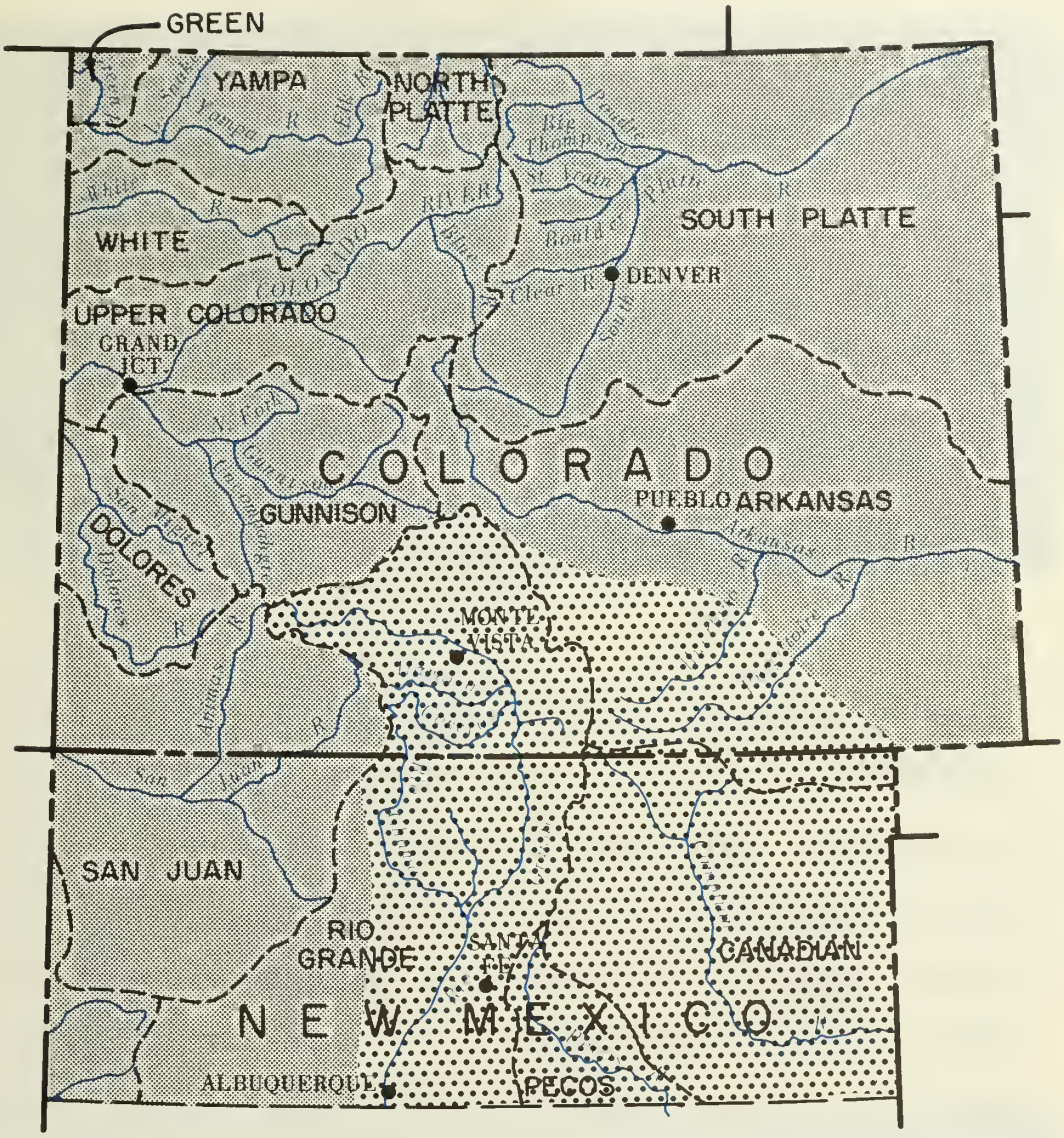
WATER SUPPLY OUTLOOK

as of

FEBRUARY 1, 1978



GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
FEBRUARY 1, 1978

THE OUTLOOK FOR A GOOD WATER SUPPLY THIS COMING SPRING IS MUCH BRIGHTER THAN LAST YEAR AS A RESULT OF GOOD PRECIPITATION IN THE FORM OF SNOW IN THE MOUNTAINS DURING DECEMBER AND JANUARY. THE ONLY EXCEPTIONS TO THIS OPTIMISTIC OUTLOOK ARE IN THE HEADWATERS OF THE RIO GRANDE WHERE THE SNOWPACK REMAINS 25% BELOW NORMAL. A CONTINUING SERIES OF DISTURBANCES MOVING THROUGH COLORADO DURING DECEMBER AND JANUARY BROUGHT ALMOST DAILY OCCURRENCES OF SNOWFALL AT HIGHER ELEVATIONS ALONG THE CONTINENTAL DIVIDE. AS A RESULT MOST STREAMS ARE FORECAST TO FLOW 30% ABOVE NORMAL DURING SPRING RUNOFF. NEW MEXICO STREAMS ARE FORECASTED TO FLOW 30% BELOW AVERAGE.

COLORADO -- SNOWPACK IN THE STATE RANGES FROM A HIGH OF 164% OF NORMAL ON THE BIG THOMPSON DRAINAGE TO A LOW OF 75% OF NORMAL ON THE RIO GRANDE. THERE EXISTS A GRADUAL TRANSITION FROM HEAVY SNOWPACKS IN THE NORTH AND CENTRAL REGIONS TO NEAR AVERAGE AND BELOW IN THE SOUTHERN MOUNTAINS. IF NORMAL PRECIPITATION IS RECEIVED FOR THE REMAINDER OF THE SEASON RUNOFF SHOULD BE 10 TO 35% ABOVE NORMAL ON MOST STREAMS WITH THE EXCEPTION OF THE RIO GRANDE BASIN. RESERVOIR STORAGE REMAINS 40% BELOW NORMAL STATEWIDE AS A REFLECTION OF DRAWDOWN DURING LAST YEAR'S DROUGHT. SOIL MOISTURE IN MOST AREAS IS POOR.

NEW MEXICO -- THE OUTLOOK FOR THIS SPRING'S WATER SUPPLY IS FOR FLOWS 25 TO 35% BELOW NORMAL AND SIMILAR TO LAST YEAR'S RUNOFF. POOR SNOWFALL IN THE MOUNTAINS HAS RESULTED IN A DEFICIENT SNOWPACK IN THE SAN JUAN MOUNTAINS AND MOST OF THE SANGRE DE CRISTO RANGE. WITH ABOUT 70% OF THE SNOW SEASON COMPLETED THE CHANCES FOR A NORMAL WATER SUPPLY ARE BECOMING SLIMMER. THIS IS NOT GOOD NEWS IN LIGHT OF RESERVOIR STORAGE FIGURES WHICH ARE 30% BELOW NORMAL. SOIL MOISTURE IN MOST AREAS IS RATED AS FAIR TO POOR.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

FEBRUARY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

DECEMBER AND JANUARY BROUGHT GOOD SNOW TO THE MOUNTAINS ALONG THE CONTINENTAL DIVIDE. AN EXCELLENT SNOWPACK EXISTS FOR THIS TIME OF YEAR AND PROSPECTS FOR A SPRING RUNOFF 30% ABOVE NORMAL ARE GOOD ON ALL FRONT RANGE STREAMS. THIS WILL HELP REPLENISH RESERVOIRS WHICH ARE CURRENTLY ONLY 70% OF AVERAGE. SOIL MOISTURE IS RATED AS FAIR TO GOOD.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

RODNEY M. ALT - AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Big Thompson River at Drake (1)	140	131	107
Boulder Creek at Orodell	65	133	49
Cache La Poudre River at Canyon Mouth (2)	310	126	247
Clear Creek at Golden (3)	170	134	127
St. Vrain Creek at Lyons	100	133	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Exc.	Exc.
Coal Creek	Exc.	Exc.
North Fork of South Platte	Exc.	Exc.
North Fork of Cache La Poudre	Exc.	Exc.
Ralston Creek	Exc.	Exc.
Rock Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Big Thompson	4	595	164
Boulder	3	317	150
Cache La Poudre	6	433	147
Clear Creek	5	279	147
Saint Vrain	2	439	158
South Platte	2	346	129

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Antero	33	14	15	14
Barr Lake	32	14	25	21
Black Hollow	8	3	4	4
Boyd Lake	44	16	34	37
Cache La Poudre	10	5	0	8
Carter Lake	109	54	64	77
Chambers Lake	9	4	2	3
Cheesman	79	28	32	56
Cobb Lake	34	0	5	15
Eleven Mile	98	82	90	87
Fossil Creek	12	7	6	7
Gross	43	22	22	29
Halligan	6	3	2	3
Horsetooth	144	29	71	86
Lake Loveland	14	9	9	9
Lone Tree	9	5	3	6
Mariano	5	5	5	5
Marshall	10	1	3	4
Marston	18	16	16	14
Milton	24	10	15	13
Standley	42	19	27	15
Terry	8	6	6	5
Union	13	9	13	10
Windsor	19	6	8	10

* 1958-1972 period.

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P.O. BOX 17107
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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

FEBRUARY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE HEADWATERS OF THE ARKANSAS RIVER HAVE A SNOWPACK 143% OF NORMAL WHICH SHOULD HELP RELIEVE THE WATER SHORTAGE OF DOWNSTREAM USERS SUFFERING FROM THE PROLONGED DROUGHT. SPRING FLOWS ARE EXPECTED TO BE SLIGHTLY ABOVE NORMAL ON THE ARKANSAS RIVER. SNOW IN THE SANGRE DE CRISTO RANGE IS 15% BELOW NORMAL WHICH WILL LIKELY RESULT IN LESS THAN NORMAL RUNOFF THIS SPRING. RESERVOIR STORAGE IN THE BASIN IS STILL EXTREMELY POOR AND SOILS ARE VERY DRY.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D. W. GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Arkansas River near Pueblo (1)	340	117	290
Arkansas River at Salida (2)	370	118	313
Cucharas River near La Veta	8	80	10
Huerfano River near Redwing	11	73	15
Purgatoire River at Trinidad (3)	30	79	38

(1) Plus change in storage in Pueblo Reservoir. (2) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine ditches. (3) Change in storage in Trinidad Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Apishapa River	Fair	Fair
Fountain Creek	Avg.	Fair
Grape Creek	Fair	Poor
Hardscrabble Creek	Fair	Poor
Monument Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Arkansas	8	412	143
Cucharas	2	96	85
Purgatoire	1	121	80

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Avarage *
Adobe	62	0	0	17
Clear Creek	11	4	6	8
Cucharas	40	0	0	3
Great Plains	150	0	0	49
Horse Creek	27	0	8	6
John Martin	621	2	12	85
Meredith	42	0	0	10
Model	15	0	0	3
Turquoise	121	48	32	16
Twin Lakes	58	24	7	26

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

FEBRUARY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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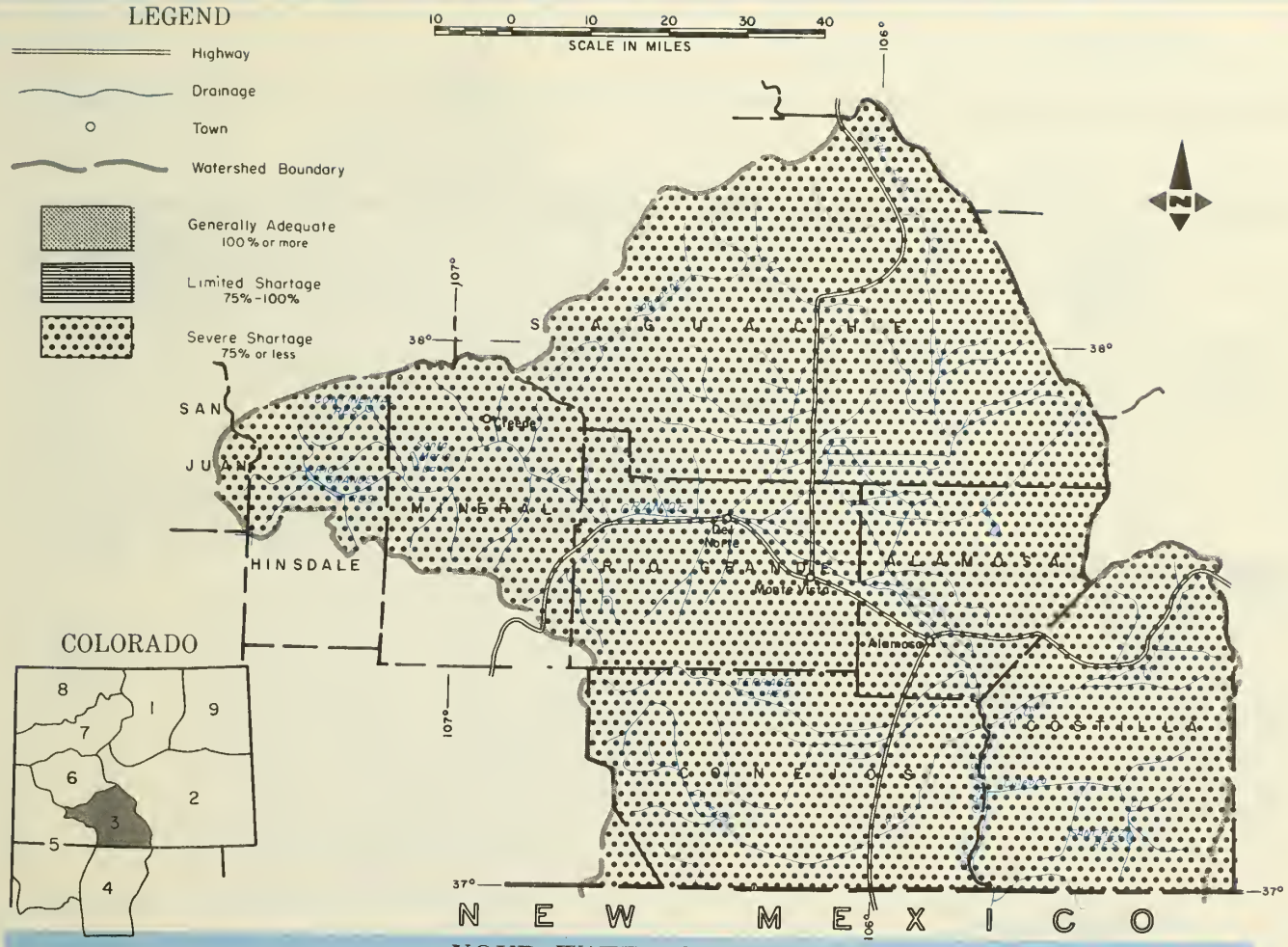

YOUR WATER SUPPLY

RELIEF FROM LAST YEAR'S DROUGHT DOES NOT APPEAR IMMINENT UNLESS HEAVY SNOWFALL OCCURS THE NEXT TWO MONTHS. THE MOUNTAIN SNOWPACK IN THE RIO GRANDE HEAD-WATERS IS 25% BELOW NORMAL. SNOWPACK IN THE SANGRE DE CRISTO RANGE IS ONLY SLIGHTLY BETTER. THE RIO GRANDE IS EXPECTED TO FLOW 35% BELOW NORMAL UNLESS ABOVE NORMAL PRECIPITATION IS RECEIVED FROM NOW ON. RESERVOIR STORAGE REMAINS 40% BELOW NORMAL AND SOILS ARE DRY.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

D. W. GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	* Average
Alamosa Creek above Terrace Reservoir	40	65	62
Conejos River near Mogote (1)	140	76	184
Culebra Creek at San Luis (2)	16	94	17
Rio Grande at 30 Mile Bridge (3)	85	70	121
Rio Grande near Del Norte (3)	310	66	467
South Fork of Rio Grande at South Fork	75	65	115

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Fair	Poor
Sangre de Cristo Cr.	Fair	Poor
Trinchera Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Alamosa	1	400	91
Conejos	2	249	81
Culebra	1	150	102
Rio Grande	10	302	75

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Continental	27	4	16	5
Platoro	60	13	14	9
Rio Grande	46	5	3	19
Sanchez	103	4	4	13
Santa Maria	45	4	7	6
Terrace	18	–	5	5

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

FEBRUARY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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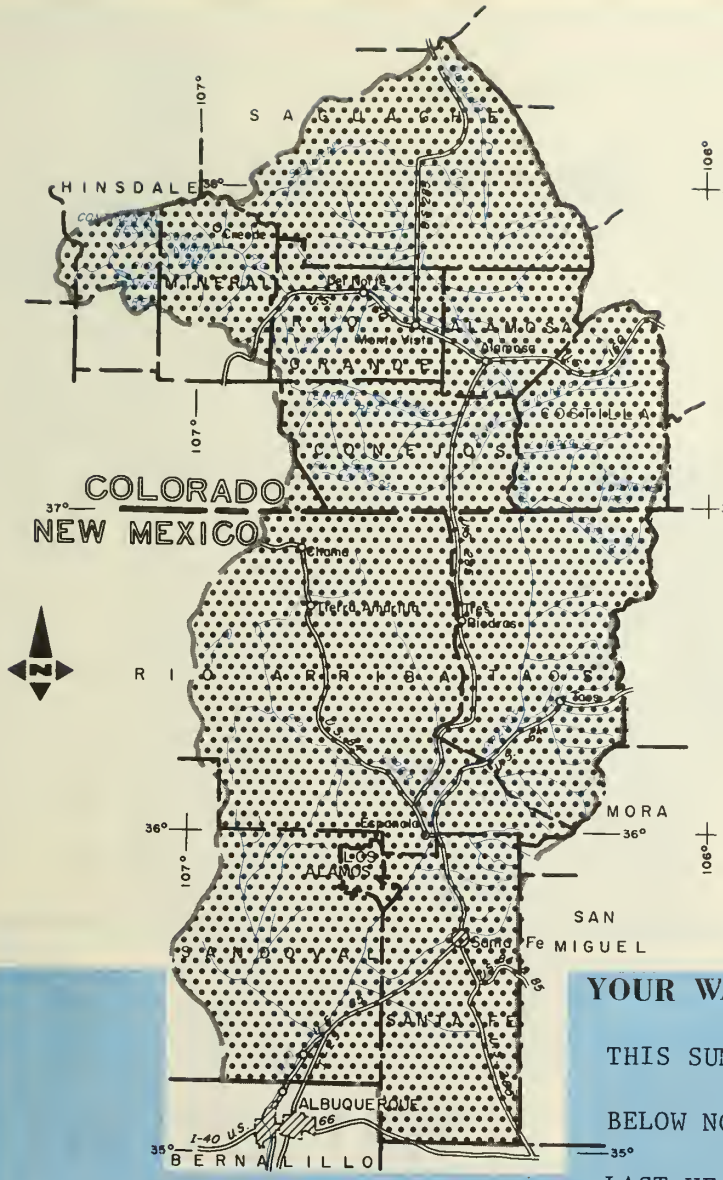

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100 % or more
- Limited Shortage 75% - 100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

THIS SUMMER'S STREAMFLOW WILL LIKELY BE BELOW NORMAL ON MOST STREAMS MUCH LIKE LAST YEAR. MORE SNOW IS NEEDED IN THE MOUNTAINS. RESERVOIRS ARE DRAWN DOWN TO NEAR HALF OF THEIR AVERAGE FOR THIS TIME OF YEAR. SOIL MOISTURE IS GENERALLY POOR.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

A. W. HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

JAMES E. TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) March—July

FORECAST POINT	FORE-CAST	% of Average	Average *
Costilla Creek at Costilla (1)	17	89	19
Jemez River near Jemez	20	69	29
Pecos River at Pecos	26	63	41
Red River at Mouth near Questa	26	90	29
Rio Chama at El Vado	140	74	190
Rio Grande at Otowi (2)	350	66	526
Rio Grande at San Marcial (2)	230	65	355
Rio Hondo near Valdez	14	100	14
Santa Cruz River at Cundiyo	8	62	12

(1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo Creek	Fair	Poor
Mora River	Fair	Poor
Nambe Creek	Fair	Poor
Rio Ojo Caliante	Fair	Poor
Rio Pueblo de Taos	Fair	Poor
Santa Fe Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Pecos	1	93	104
Red River	1	77	69
Rio Chama	2	195	98
Rio Grande, NM	8	104	73
Rio Hondo	-	--	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Avalon	5	2	4	3
Caballo	344	19	133	50
Conchas	273	107	83	185
El Vado	195	27	110	2
Elephant Butte	2195	215	318	442
McMillan	34	8	3	17
Sumner	111	42	20	80

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
FEBRUARY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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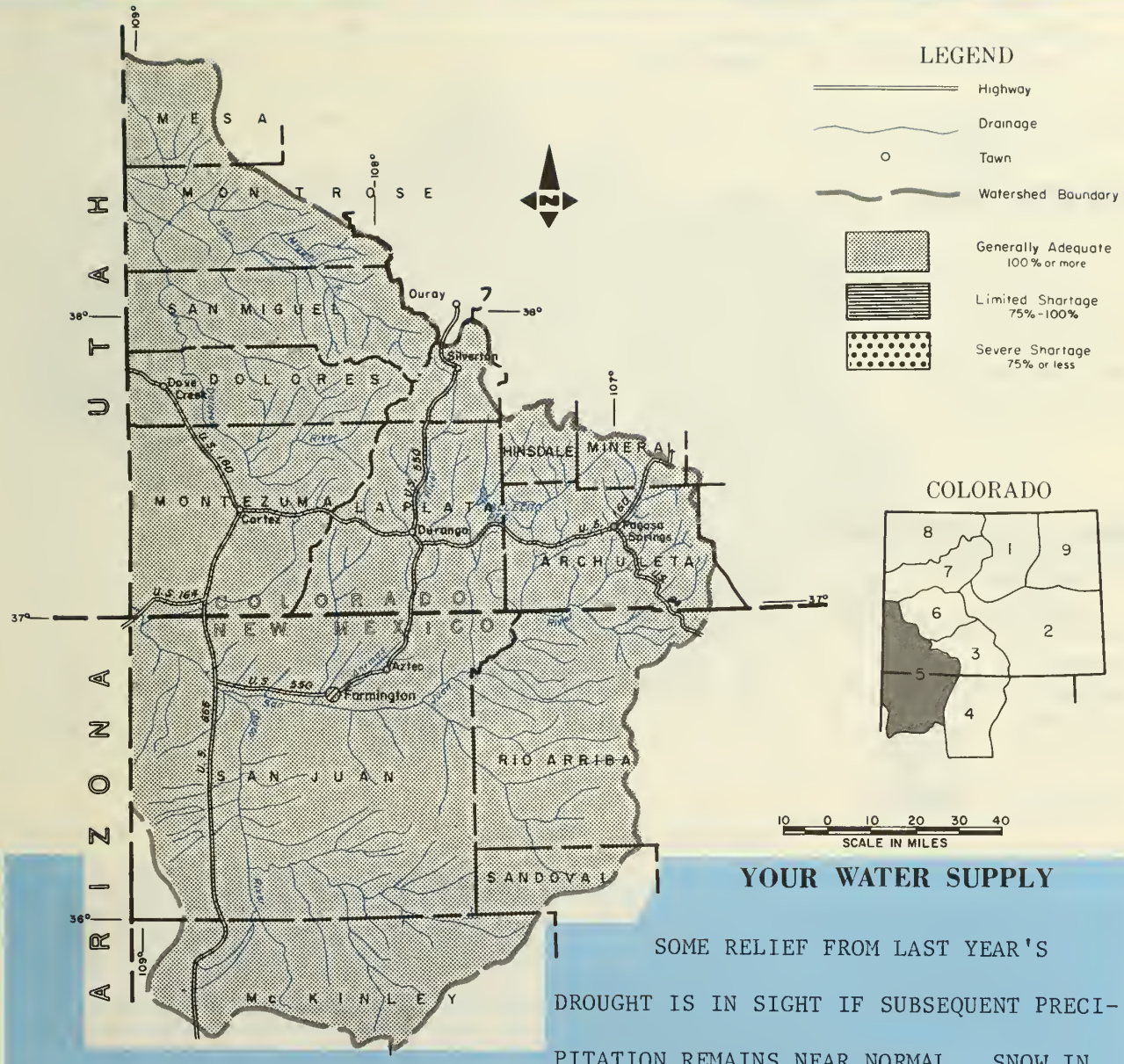

YOUR WATER SUPPLY

SOME RELIEF FROM LAST YEAR'S DROUGHT IS IN SIGHT IF SUBSEQUENT PRECIPITATION REMAINS NEAR NORMAL. SNOW IN MOUNTAINS IS 20% ABOVE AVERAGE IN THE ANIMAS AND DOLORES BUT IS 15% BELOW NORMAL IN THE SAN JUAN BASIN. PROSPECTIVE STREAMFLOW SHOULD BE NEAR NORMAL.

This report prepared by

JACK N WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

A W HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D W GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Animas River at Durango	450	106	423
Dolores River at Dolores	265	114	232
La Plata River at Hesperus	26	108	24
Los Pinos River at Bayfield (1)	200	100	198
Mancos River near Towac (2)	14	100	14
Inflow to Navajo River (1 & 3)	580	97	597
Piedra Creek at Arboles	150	81	185
San Juan River at Carracas	280	79	354
San Miguel River at Placerville	150	115	130

(1) Observed flow plus change in storage in Vallecito Reservoir. (2) March-July. (3) April-July.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida River	Avg.	Avg.
Hermosa Creek	Avg.	Avg.
West Dolores River	Exc.	Avg.
Williams Creek	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Animas	5	441	117
Dolores	5	466	129
San Juan	5	271	84

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Groundhog	22	6	6	9
Jackson Gulch	10	3	17	4
Lemon	40	5	17	19
Navajo	1696	956	1145	1237
Vallecito	126	20	47	53

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

FEBRUARY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOWPACK IS 400% OF LAST YEAR'S RECORD LOW LEVELS AND PROMISES A GOOD SPRING AND SUMMER RUNOFF. ALL STREAMS ARE FORECASTED TO FLOW BETWEEN 10 AND 20% ABOVE NORMAL AND SHOULD HELP FILL RESERVOIRS WHICH HAVE ONLY HALF OF THEIR NORMAL CONTENTS FOR THIS TIME OF YEAR. ABOUT 60% OF THE WINTER'S SNOW IS ON THE GROUND BY FEBRUARY 1. WE STILL HAVE OVER TWO MONTHS IN THE PRIMARY SNOW ACCUMULATION SEASON.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Gunnison River inflow to Blue Mesa Reservoir (1)	900	114	792
Gunnison River near Grand Junction (2)	1350	114	1184
North Fork of Gunnison (3)	290	110	263
Surface Creek near Cedaredge	19	118	16
Uncompahgre River at Colona	160	119	134

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ohio Creek	Exc.	Avg.
Slate River	Exc.	Avg.
Taylor River	Exc.	Avg.
Tomichi Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Gunnison	10	408	130
Surface Creek	3	494	127
Uncompahgre	3	359	139

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Blue Mesa	830	239	415	491
Morrow Point	121	114	115	100
Taylor	106	34	59	63

* 1958-1972 period.

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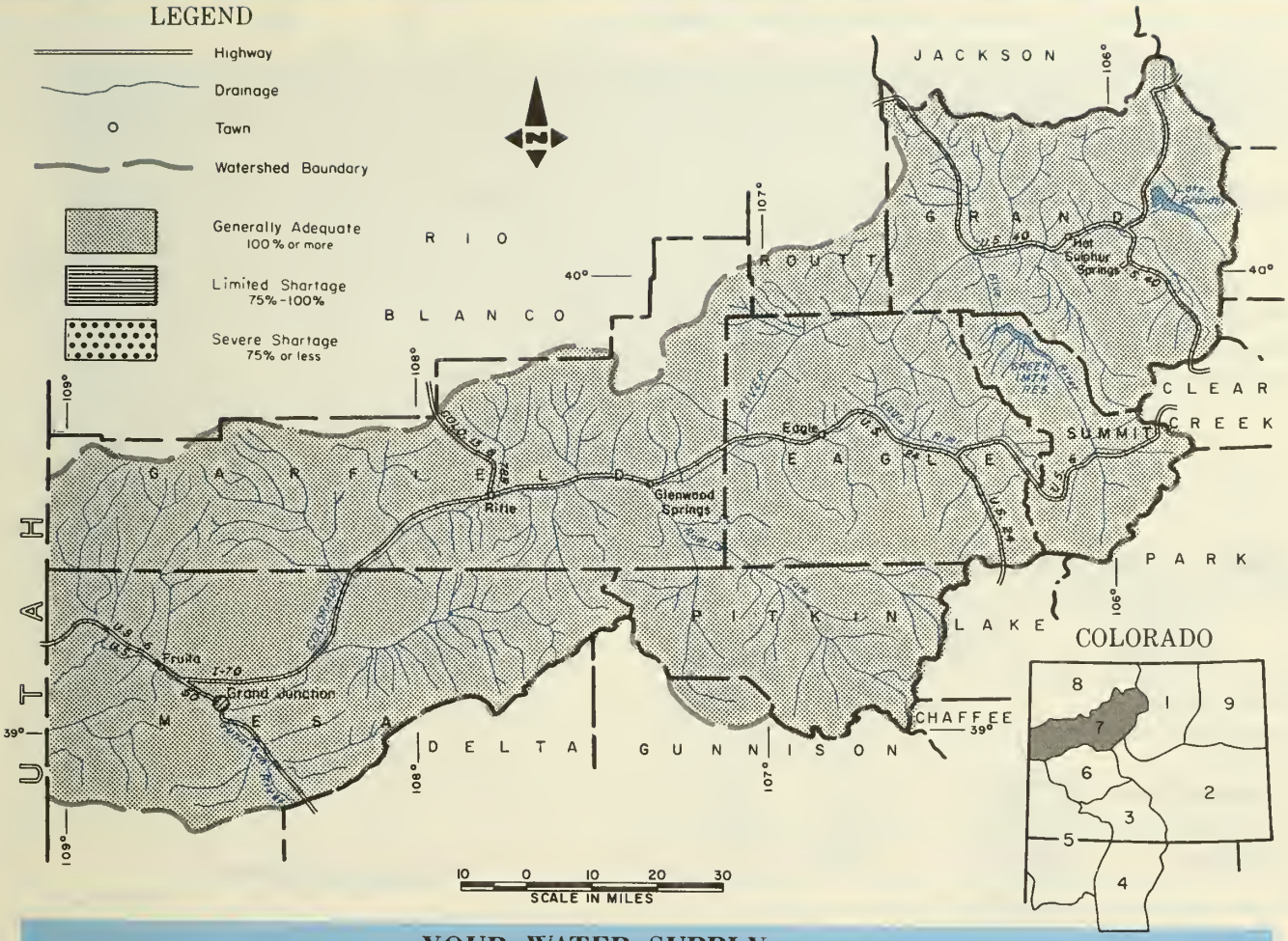
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
FEBRUARY 1, 1978

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

DECEMBER AND JANUARY WERE PARTICULARLY GOOD MONTHS FOR PRECIPITATION IN THE BASIN. BASIN-WIDE PRECIPITATION WAS 165% OF NORMAL DURING JANUARY. SNOWPACKS ARE EXCEPTIONAL AND ARE MOSTLY AROUND 150% OF AVERAGE. THIS CONDITION SHOULD GENERATE SPRING RUNOFFS 15 TO 30% ABOVE NORMAL. THESE FLOWS WILL BE MOST WELCOME AFTER LAST SEASON'S DRY SPELL. RESERVOIR LEVELS ARE GENERALLY WELL BELOW NORMAL BUT SHOULD RECOVER IF THE FORECASTED FLOWS MATERIALIZE.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Blue River inflow to Dillon Reservoir	220	130	169
Blue River inflow to Green Mountain Reservoir (1)	380	128	297
Colorado River near Cameo (6)	3000	126	2370
Colorado River near Dotsero (3)	1900	132	1434
Colorado River inflow to Granby Reservoir (2)	300	132	228
Roaring Fork at Glenwood Springs (4)	820	115	713
Williams Fork near Parshall (5)	90	143	63
Willow Creek inflow to Willow Creek Reservoir	65	138	47

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Blue River	6	349	149
Colorado	18	377	151
Plateau	3	484	124
Roaring Fork	7	416	128
Williams Fork	3	369	157
Willow	2	346	140

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average*
Dillon	254	122	215	234
Granby	466	75	216	255
Green Mountain	139	51	76	77
Homestake	43	0	23	20
Ruedi	101	80	69	70
Vega	32	–	6	10
Williams Fork	97	27	52	34
Willow Creek	9	7	6	6

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
FEBRUARY 1, 1978

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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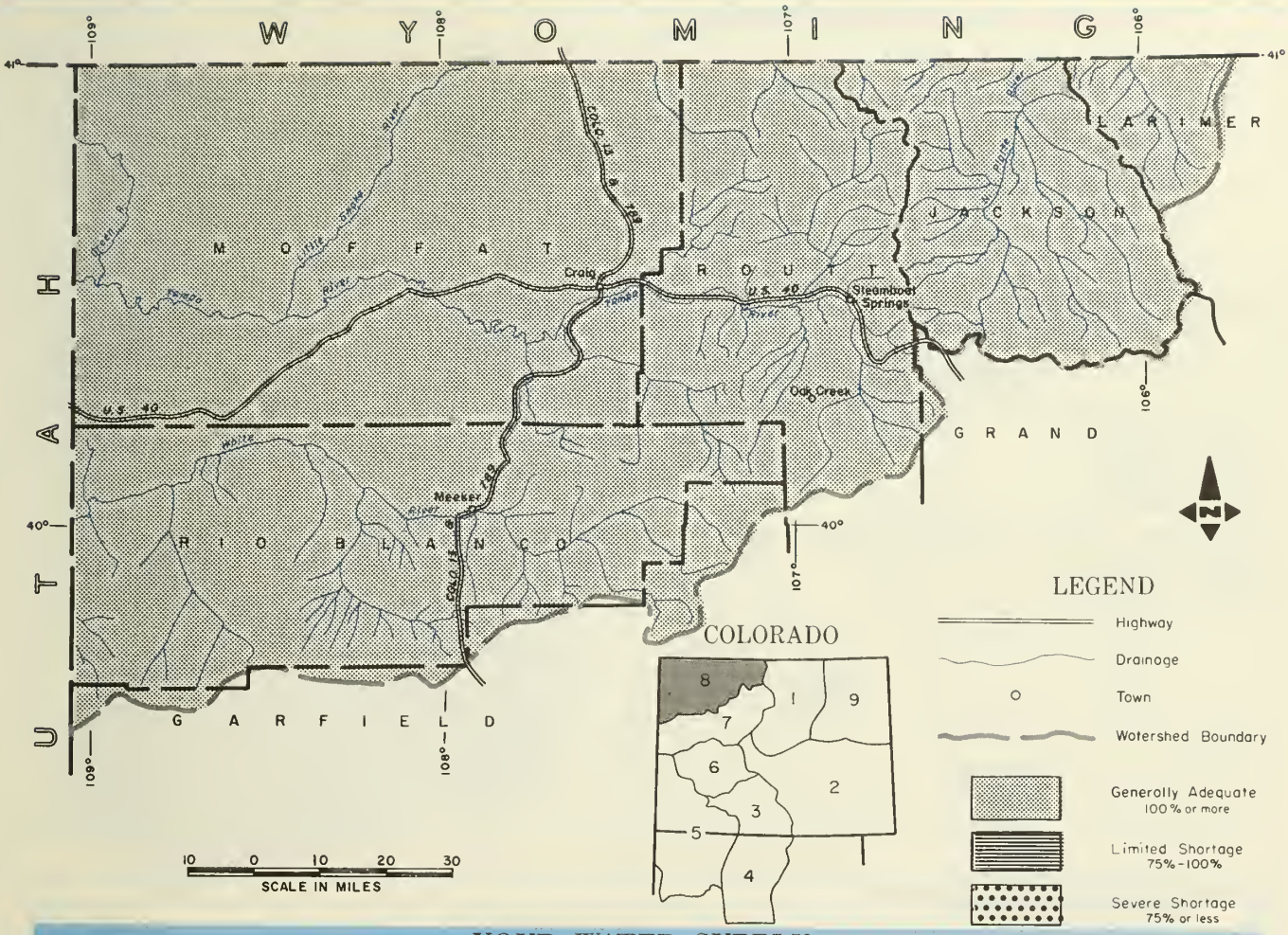

YOUR WATER SUPPLY

A COMPLETE REVERSAL OF LAST YEAR'S SNOWPACK IS IN EVIDENCE THIS YEAR. ALL WATERSHEDS REPORT SNOW 130 TO 160% OF AVERAGE AND 400% OF LAST YEAR'S PACK. SEVERAL COURSES MEASURED MAXIMUM OF RECORD. THE OUTLOOK FOR THIS SEASON'S WATER SUPPLY IS EXCELLENT AND IS PREDICTED TO BE BETWEEN 30 AND 40% GREATER THAN NORMAL ON ALL WATERSHEDS. SOIL MOISTURE IS FAIR TO GOOD IN MOST AREAS.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Elk River at Clark	270	136	198
Laramie River near Woods	165	132	127
Little Snake River at Lily	450	139	324
North Platte River at Northgate	336	140	240
White River near Meeker	370	125	295
Yampa River near Maybell	1250	138	905
Yampa River at Steamboat Springs	380	139	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Exc.	Exc.
Hunt Creek	Exc.	Exc.
Illinois River	Exc.	Exc.
Michigan River	Exc.	Exc.
Oak Creek	Exc.	Exc.
Trout Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Elk	1	426	157
Laramie	2	355	132
North Platte	5	313	147
White	2	346	142
Yampa	5	395	165

* 1958-1972 period.

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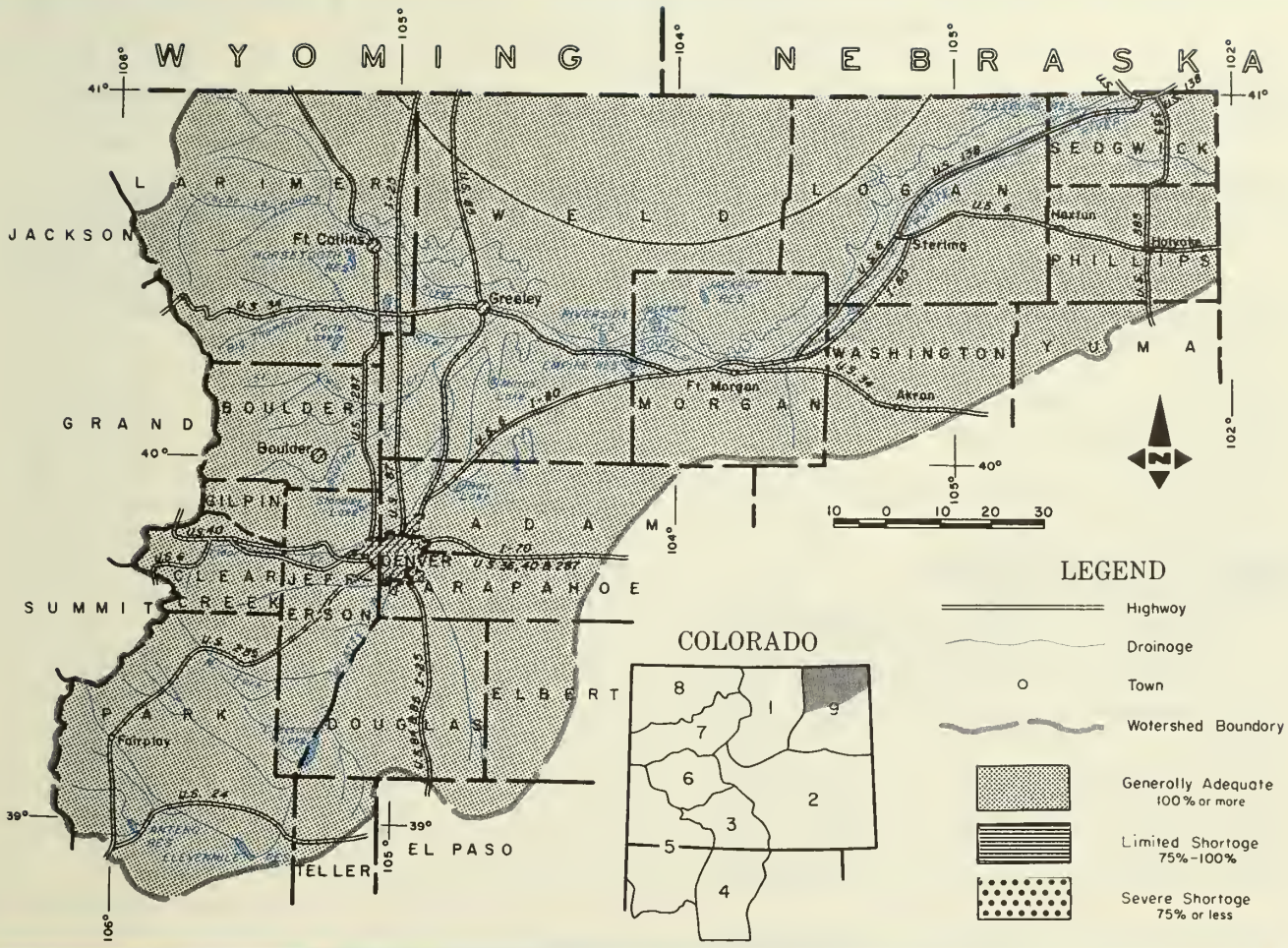
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

FEBRUARY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

FRONT RANGE STREAMS ARE IN GOOD SHAPE WITH SNOWPACKS AROUND 150% OF NORMAL. WITH AVERAGE PRECIPITATION FROM NOW ON STREAMFLOWS ARE EXPECTED TO BE ABOUT 30% ABOVE THE NORM. THIS SHOULD HELP REFILL RESERVOIRS WHICH WERE DEPLETED DURING LAST YEAR'S RECORD DRY SPELL. SOIL MOISTURE IN MOST IRRIGATED AREAS IS RATED AS FAIR TO GOOD.

This report prepared by

JACK N. WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M ALT—AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	140	131	107
Boulder Creek at Orodell	65	133	49
Cache La Poudre River at Canyon Mouth (2)	310	126	247
Clear Creek at Golden (3)	170	134	127
Saint Vrain Creek at Lyons (4)	100	133	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through Berthoud Pass Ditch. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
South Platte from Greeley to Fort Morgan	Exc.	Avg.
South Platte from Fort Morgan to Sterling	Exc.	Avg.
South Platte below Sterling	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average*
Big Thompson	4	595	164
Boulder	3	317	150
Cache La Poudre	6	433	147
Clear Creek	5	279	147
Saint Vrain	2	439	158
South Platte	2	346	129

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Carter	109	54	64	77
Cheesman	79	28	32	56
Eleven Mile	98	82	90	87
Empire	38	14	26	26
Horsetooth	144	29	71	86
Jackson	35	29	30	28
Julesburg	28	20	19	20
Point of Rocks	70	47	50	53
Prewitt	33	11	23	16
Riverside	58	28	42	45

* 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of FEBRUARY 1, 1978

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVG. 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	1/26	41	12.2	2.6	10.4
Roach	1/28	59	15.5	5.2	10.6
North Platte River					
Cameron Pass	2/01	71	23.9	8.6	16.5
Columbine Lodge	1/30	85	26.5	6.8	14.3
Northgate	2/01	21	4.2	1.8	3.8
Park View	1/31	25	6.3	2.2	5.8
Willow Cr. Pass (B)	1/31	34	9.9	3.2	7.7
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	1/30	25	5.8	2.8	5.1
Boulder Falls	1/29	41	11.8	3.7	7.1
University Camp	1/29	55	17.0	4.4	10.9
Big Thompson River					
Deer Ridge	2/01	18	5.2	0.0	2.9
Hidden Valley	2/01	37	10.4	1.9	6.4
Lake Irene (B)	1/29	69	21.0	4.9	13.8
Long's Peak	1/31	36	11.0	1.2	6.0
Two Mile	2/01	45	13.0	2.1	8.6
Cache La Poudre					
Bennett Creek	1/30	25	5.4	0.7	---
Big South	1/27	13	2.3	0.2	1.4
Cameron Pass	2/01	71	23.9	8.6	16.5
Chambers Lake	1/27	41	10.9	1.1	5.6
Deadman Hill	1/26	41	12.2	2.6	10.4
Hourglass Lake	1/30	26	6.6	0.7	---
Joe Wright	2/01	68	21.0	9.1	---
Lost Lake	1/27	45	11.9	2.2	7.7
Red Feather	1/26	23	5.9	0.8	4.0
Clear Creek					
Baltimore (B)	1/30	25	5.8	2.8	5.1
Berthoud Falls	1/30	42	12.0	4.0	8.3
Empire	1/30	24	5.5	2.2	4.5
Grizzly Peak (B)	1/26	57	17.0	5.8	10.6
Loveland Lift	NS	--	---	9.1	12.2
Loveland Pass	1/26	50	15.0	5.0	9.0
St. Vrain River					
Copeland Lake	1/28	23	5.1	0.8	2.8
Ward	1/30	24	5.0	1.5	3.6
Wild Basin	1/28	41	11.9	---	7.2
South Platte River					
Como	1/25	19	4.9	0.6	---
Geneva Park	1/28	12	2.8	0.1	---
Horseshoe Mt.	1/26	38	8.9	1.4	---
Hoosier Pass	1/25	36	10.2	3.0	8.0
Jefferson Creek	1/26	30	7.8	2.2	5.9
Mosquito	1/26	37	9.5	2.1	---
Trout Creek Pass	1/26	10	1.7	0.3	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	1/31	15	3.1	4.7	---
Cooper Hill (B)	1/30	40	10.6	3.1	6.9
East Fork	1/30	34	8.6	2.6	6.0
Four Mile Park	1/30	21	4.6	0.5	3.9
Fremont Pass	1/30	54	15.3	4.0	9.8
Garfield	1/31	36	10.2	2.8	8.5
Hermit Lake	1/30	22	5.4	2.8	---
Monarch Pass	1/31	50	14.3	4.0	10.3
Tennessee Pass	1/30	35	9.2	2.2	6.5
Twin Lakes Tunnel	1/20	35	10.0	0.9	6.0
Westcliffe	1/30	50	13.9	2.8	---
Cucharas River					
Apishapa	1/30	15	4.2	4.2	4.5
Cucharas Creek	1/30	17	4.4	4.5	---
La Veta Pass (B)	2/02	18	4.4	4.8	5.6
Purgatoire River					
Bourbon	1/31	21	3.5	2.9	4.4
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	1/31	17	3.2	0.8	3.5
Conejos River					
Cumbres	1/24	54	12.1	5.1	13.1
La Manga	1/24	51	10.0	3.6	---
Platoro	1/30	33	8.6	3.2	12.5
Culebra River					
Brown Cabin	1/27	20	3.4	2.4	---
Cottonwood (B)	1/27	17	3.5	2.3	---
Culebra	1/31	30	5.7	3.8	5.6
La Veta Pass (B)	2/02	18	4.4	4.8	5.6
Trinchera (B)	1/30	19	3.4	3.2	---
Rio Grande					
Cochetopa Pass	1/24	21	4.2	1.5	3.6
Grayback	1/27	30	6.9	2.0	---
Hiway	1/30	42	10.8	3.8	15.6
Lake Humphrey	1/26	16	2.4	1.2	4.8
Love Lake	1/30	23	4.4	1.0	---
Pass Creek	1/30	23	4.8	2.0	8.2
Pool Table	1/30	14	2.4	1.0	5.2
Porcupine	1/30	27	6.2	1.3	8.1
Santa Maria	1/30	21	4.4	0.1	3.3
Upper Rio Grande	1/30	24	4.9	1.4	5.8
Wolf Creek Pass	1/31	51	14.2	5.3	17.4
Wolf Cr. Summit (B)	1/30	50	13.0	4.8	18.5
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela	1/27	12	2.6	2.8	2.5
Rio Chama					
Bateman	1/27	32	7.3	3.5	---
Chama Divide	1/25	18	3.0	1.5	2.9
Chamita	1/24	27	5.2	2.7	5.5
Rio Grande					
Alamitos	1/30	15	3.0	2.7	---
Bernal Trail	NS	--	---	---	---
Big Tesuque	1/31	13	2.7	2.2	4.0
Elk Cabin	1/29	7	1.5	1.0	2.7
Hopewell	1/30	38	9.6	3.6	---
La Cueva	1/30	15	3.8	3.0	---
North Costilla	1/30	14	3.4	---	---
Palo	1/27	20	3.7	3.3	---
Payrole	1/30	21	5.2	3.4	6.1
Powderhouse	NS	--	---	---	---
Quemazon	1/28	22	3.7	3.5	6.1
Rio En Medio	1/31	24	5.8	3.7	6.0
Sandoval	1/27	11	1.9	2.6	3.5
Senorita Divide	1/27	21	4.3	3.9	---
Taos Canyon	1/27	13	2.0	4.0	2.7
Tres Ritos	1/30	10	2.3	3.7	3.3
Rio Hondo					
Taos Powderhorn	1/30	46	12.6	9.7	---
Red River					
Hematite Park (B)	1/26	10	2.0	2.6	2.9
Red River #2	1/26	20	3.8	3.5	---

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of FEBRUARY 1, 1978

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	1/30	33	9.6	2.0	8.0
Lemon	1/31	23	6.2	2.2	---
Mineral Creek	1/30	45	11.8	2.6	9.9
Molas Lake	1/30	38	11.2	2.1	8.7
Purgatory	1/30	51	13.1	1.9	---
Red Mt. Pass (B)	1/30	80	23.0	5.9	19.0
Silverton Sub-Sta.	1/30	28	7.5	---	5.6
Spud Mountain	1/30	55	15.8	3.6	15.2
Dolores River					
Lizard Head	1/30	50	12.6	2.0	10.4
Lone Cone	1/27	47	11.8	3.0	11.8
Ophir Loop	1/30	50	13.0	4.1	---
Rico	1/30	27	6.2	1.2	5.6
Telluride	1/30	34	8.2	2.2	4.7
Trout Lake	1/30	47	13.4	2.8	8.1
San Juan River					
Chama Divide (B)	1/25	18	3.0	1.5	2.9
Chamita (B)	1/24	27	5.2	2.7	5.5
Upper San Juan	1/30	65	18.0	5.4	19.1
Wolf Cr. Pass (B)	1/31	51	14.2	5.3	17.4
Wolf Cr. Summit	1/30	50	13.0	4.8	18.5
GUNNISON BASIN					
Gunnison River					
Alexander Lake	1/30	60	16.4	3.5	12.7
Butte	1/26	44	12.2	2.8	---
Cochetopa Pass (B)	1/24	21	4.2	1.5	3.6
Crested Butte	1/25	44	12.4	2.9	7.4
Keystone	1/26	63	18.6	4.0	13.1
Lake City	1/23	27	6.2	0.9	---
Mesa Lakes (B)	1/27	51	12.8	2.4	10.5
McClure Pass	1/25	41	10.2	3.8	11.1
Park Cone	1/25	32	7.9	1.5	6.1
Park Reservoir	1/30	66	18.7	3.8	14.6
Porphyry Creek	1/31	49	14.1	4.5	10.0
Tomichi	1/31	40	11.3	3.1	8.1
Surface Creek					
Alexander Lake	1/30	60	16.4	3.5	12.7
Mesa Lakes	1/27	51	12.8	2.4	10.5
Park Reservoir	1/30	66	18.7	3.8	14.6
Uncompahgre River					
Ironton Park	1/30	43	13.0	4.2	8.0
Red Mountain Pass	1/30	80	23.0	5.9	19.0
Telluride (B)	1/30	34	8.2	2.2	4.7
COLORADO BASIN					
Blue River					
Blue River	1/25	30	7.3	2.4	5.2
Fremont Pass	1/30	54	15.3	4.0	9.8
Grizzly Peak	1/26	57	17.0	5.8	10.6
Hoosier Pass (B)	1/25	36	10.2	3.0	8.0
Shrine Pass	1/23	52	15.0	4.0	10.3
Snake River	1/26	38	8.2	1.7	5.2
Summit Ranch	1/30	25	6.6	2.3	---
Colorado River					
Arrow	1/30	44	10.7	2.4	7.5
Berthoud Pass	1/27	57	13.2	5.1	9.4
Berthoud Summit	1/30	57	17.3	7.1	11.4
Cooper Hill	1/30	40	10.6	3.1	6.9
Fiddler Gulch	Discontinued				
Glenmar Ranch	1/31	27	7.6	2.4	5.1
Gore Pass	1/30	42	11.4	2.9	6.2
Grand Lake	1/28	37	8.8	2.1	4.9
Lake Irene	1/29	69	21.0	4.9	13.8
Lapland	1/30	31	8.9	2.0	6.6
Lulu	NS	--	---	---	---
Lynx Pass	1/30	47	12.6	3.1	7.6
McKenzie Gulch	1/23	21	4.0	1.2	4.1
Middle Fork	1/31	31	8.8	2.8	5.7
Milner	1/29	50	14.0	2.7	---
North Inlet	1/30	36	9.3	2.2	5.1
Pando	1/23	32	7.9	1.0	6.0
Phantom Valley	1/28	43	11.4	2.6	6.5
Ranch Creek	1/30	36	7.6	1.8	5.6
Tennessee Pass (B)	1/30	35	9.2	1.8	6.5
Vail	2/01	65	19.0	---	---
Vasquez	1/26	44	10.4	2.1	7.7
Roaring Fork					
Aspen	1/28	50	14.4	2.3	10.0
Independence Pass	1/20	44	12.7	1.7	9.7
Ivanhoe	1/24	50	14.0	4.5	10.2
Kiln	1/24	34	9.1	2.8	---
Lift	1/28	52	15.1	3.5	10.1
McClure Pass	1/25	41	10.2	3.8	11.1
Nast	1/27	32	6.9	1.3	4.3
North Lost Trail	1/25	40	10.4	3.0	10.0
Williams Fork River					
Glenmar Ranch	1/31	27	7.6	2.4	5.1
Jones Pass	1/27	57	14.2	3.1	8.7
Middle Fork	1/31	31	8.8	2.8	5.7
Willow Creek					
Granby	1/31	29	7.4	1.8	4.7
Willow Cr. Pass	1/31	34	9.9	3.2	7.7
Plateau Creek					
Mesa Lakes	1/27	51	12.8	2.4	10.5
Park Reservoir	1/30	66	18.7	3.8	14.6
Trickle Divide	1/30	67	19.3	4.3	16.0
YAMPA BASIN					
Elk River					
Elk River	2/01	62	17.9	4.2	11.4
Hahn's Peak	1/30	53	14.8	3.1	---
White River					
Burro Mountain	1/30	52	15.6	4.4	11.5
Rio Blanco	1/31	46	13.5	4.0	9.0
Yampa River					
Columbine (B)	1/30	85	26.5	6.8	14.3
Dry Lake	1/27	76	20.9	5.1	12.0
Lynx Pass (B)	1/30	47	12.6	3.1	7.6
Rabbit Ears	1/30	83	24.8	5.7	16.1
Tower	1/31	154	54.2	12.5	---
Yampa View	1/30	50	13.9	4.3	9.8

NOTE: NS - No Survey
(B) - On Adjacent Drainage

GPO 844-433

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

- Colorado State Engineer
- New Mexico State Engineer
- Nebraska State Engineer
- Colorado State University Experiment Station
- Rocky Mountain Forest and Range Experiment Station
- New Mexico Dept. of Game and Fish

FEDERAL

- Department of Agriculture
  - Forest Service
  - Soil Conservation Service
- Department of Interior
  - Bureau of Reclamation
  - Geological Survey
  - National Park Service
  - Indian Service
- Department of Commerce
  - NOAA, National Weather Service
- Defense Department
  - Army Engineer Corps
- Atomic Energy Comission

INVESTOR OWNED UTILITIES

- Colorado Public Service Company
- Public Service Company of New Mexico

MUNICIPALITIES

- City of Denver
- City of Boulder
- City of Greeley
- City of Fort Collins

WATER USERS ORGANIZATIONS

- Arkansas Valley Ditch Association
- Colorado River Water Conservation District

IRRIGATION PROJECTS

- Farmers Reservoir and Irrigation Company
- San Luis Valley Irrigation District
- Santa Maria Reservoir Company
- Costilla Land Company
- Uncompahgre Valley Water Users' Association
- Twin Lakes Reservoir and Canal Company
- Trinchera Irrigation Co.

CORPORATIONS

- Aspen Skiing Corp.
- Colorado Fuel and Iron Corp.
- Climax Molybdenum Corp.
- Lake Eldora Corp.
- Vail Associates, Incorporated
- Vermejo Park Corp. (NM)
- Taylor Lumber and Land Company

PRIVATE CITIZENS

- Otto Goemmer, Colorado
- Moreno Ranch, New Mexico

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
MAR. 1, 1978

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SOME OF THE DATA IN THIS REPORT HAVE BEEN RECEIVED THROUGH THE SOIL CONSERVATION SERVICE'S NEW SNOTEL SYSTEM WHICH TRANSMITS INFORMATION VIA THE SPACE AGED METEOR BURST METHOD FROM DATA SITES TO MASTER STATIONS LIKE THESE.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Cosper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.

USDA-SCS-PORTLAND, OR 1977

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

ROBERT G. HALSTEAD

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

ALBERT W. HAMELSTROM

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN

DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
BERNARD A. SHAFER, Assistant Snow Survey Supervisor
JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Calorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Nartheast Prowers, Prowers, Kiowa County, West Otero, East Otera, and Big Sandy Soil Conservatian Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes wa ter supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pajoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditians in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

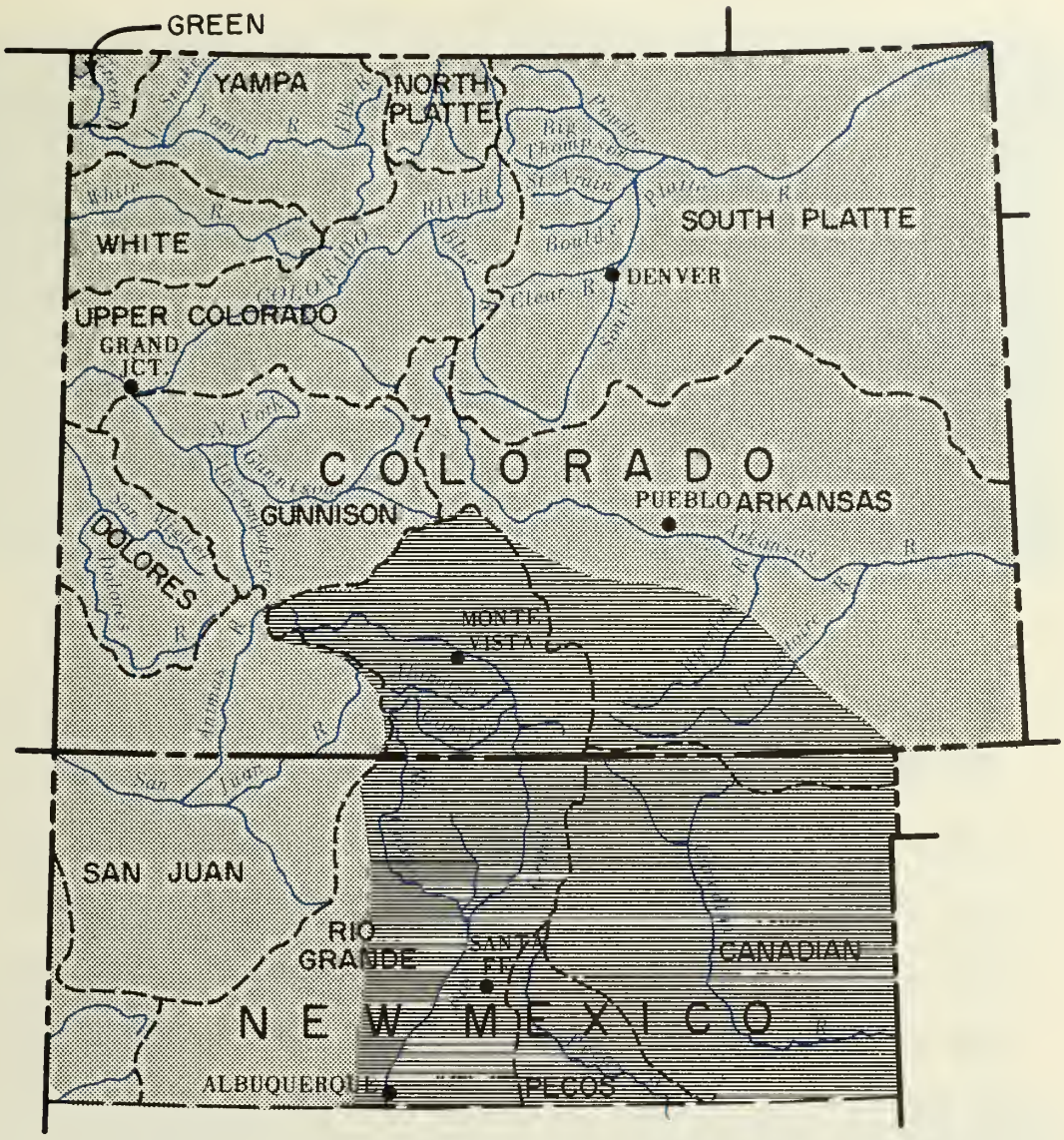
Describes water supply conditions in Sedgwick, Sauth Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek,and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

MARCH 1, 1978



GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
MARCH 1, 1978

SNOWFALL DURING FEBRUARY FOLLOWED A SIMILAR PATTERN AS JANUARY. SNOWFALL IS GOOD IN NORTHERN COLORADO AND DIMINISHES TO THE SOUTH. BOTH SOUTHERN COLORADO AND NORTHERN NEW MEXICO NEED ADDITIONAL SNOW TO BE ASSURED OF GOOD WATER SUPPLIES THIS SUMMER. CARRYOVER RESERVOIR STORAGE IS BELOW AVERAGE IN BOTH STATES. SOIL MOISTURE CONDITIONS NEED IMPROVEMENT BEFORE SPRING PLANTING.

COLORADO -- SNOWPACK OVER THE STATE REMAINS SIMILAR TO LAST MONTH. THE NORTHERN THIRD OF THE STATE HAS AN EXCELLENT PACK, IN SOME PLACES APPROACHING A MAXIMUM OF RECORD. THE CENTER PORTION OF THE STATE HAS NEAR NORMAL TO SLIGHTLY ABOVE WHILE THE LOWER THIRD HAS BELOW AVERAGE SNOW. THE ONLY EXCEPTION IS THE SOUTHWEST CORNER. ANIMAS AND DOLORES BASINS HAVE SNOW ABOUT 125% OF THE 15-YEAR AVERAGE. RESERVOIR STORAGE IS LOW STATE-WIDE REFLECTING THE DRAWDOWN FROM LAST YEAR'S DROUGHT. SOIL MOISTURE IS ONLY FAIR STATEWIDE.

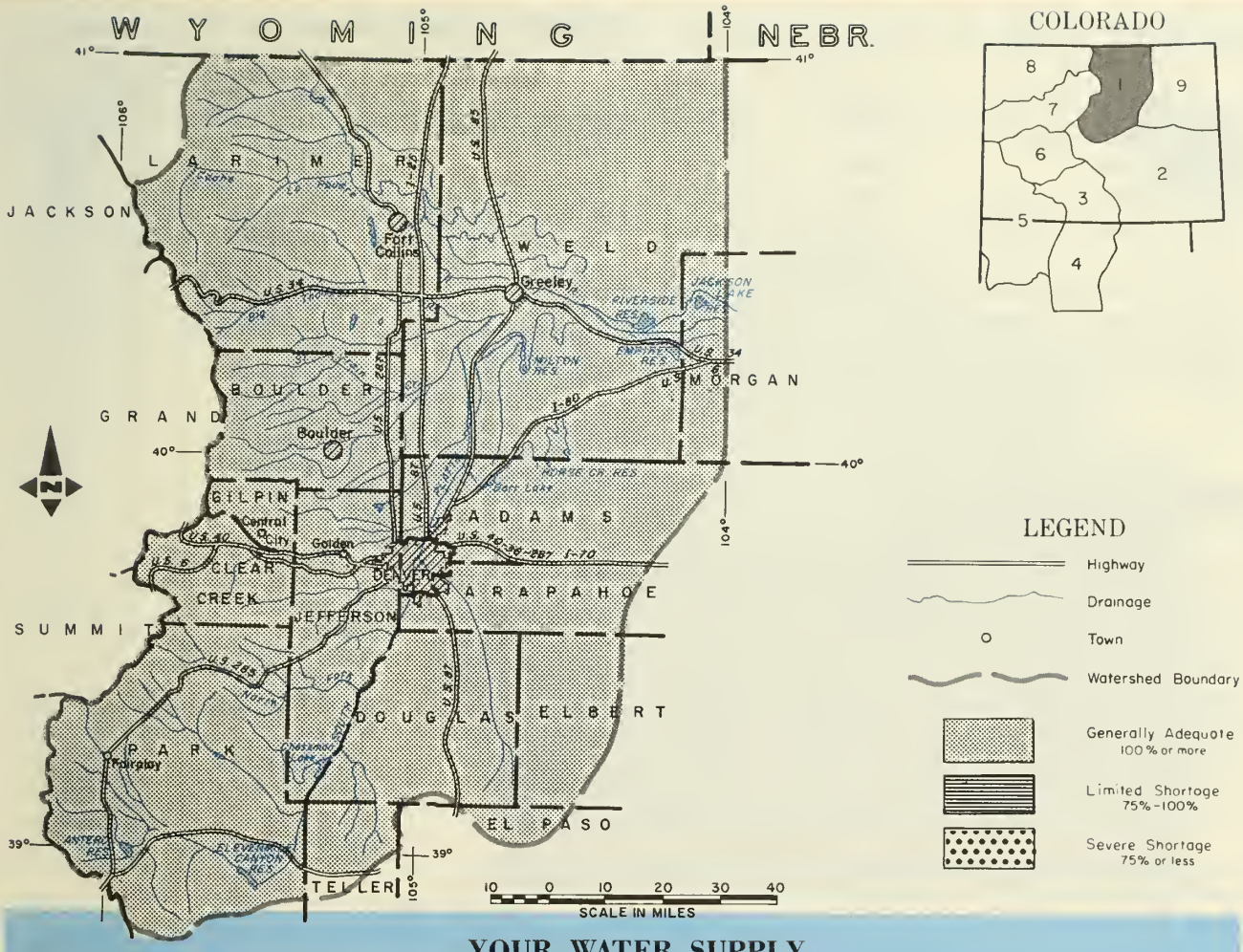
NEW MEXICO -- SNOWS DURING THE LATTER PORTION OF FEBRUARY IMPROVED THE MOUNTAIN SNOWPACK SIGNIFICANTLY FROM LAST MONTH. MOST WATERSHEDS NOW CONTAIN SNOWPACK NEAR AVERAGE. THIS SITUATION SHOULD PRODUCE SPRING AND SUMMER RUNOFF CLOSE TO NORMAL ON ALL SMALL STREAMS. THE EXCEPTION IS THE RIO GRANDE MAINSTEM WHICH WILL LIKELY FLOW ONLY 85% OF NORMAL DUE TO A DEFICIENT SNOWPACK IN ITS COLORADO HEADWATERS. MANY SMALL STREAMS HAVE BEGUN THEIR SPRING RUNOFF. RESERVOIR STORAGE REMAINS POOR AT ONLY 58% OF NORMAL.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1978

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE SOUTH PLATTE AND ITS NORTHERN TRIBUTARIES IS STILL CONSIDERABLY ABOVE NORMAL, ESPECIALLY AT ELEVATIONS ABOVE 9500 FEET. THE LOWER ELEVATION SNOWPACK IS JUST ABOVE NORMAL. RESERVOIR CARRYOVER STORAGE IS ONLY ABOUT 70% OF AVERAGE. SUMMER STREAMFLOW SHOULD BE ABOVE NORMAL IF THE SNOWPACK CONTINUES TO INCREASE AT PRESENT RATE.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

RODNEY M. ALT—AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	130	121	107
Boulder Creek at Orodell	60	122	49
Cache La Poudre River at Canyon Mouth (2)	310	126	247
Clear Creek at Golden (3)	160	127	127
St. Vrain Creek at Lyons (4)	95	127	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Avg.	Fair
Coal Creek	Avg.	Fair
North Fork of South Platte	Avg.	Fair
North Fork of Cache La Poudre	Avg.	Fair
Ralston Creek	Avg.	Fair
Rock Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Big Thompson	5	600	144
Boulder	3	320	124
Cache La Poudre	8	397	130
Clear Creek	5	226	128
Saint Vrain	3	475	136
South Platte	3	270	102

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average*
Antero	16	15	15	14
Barr Lake	32	16	29	23
Black Hollow	8	3	4	4
Boyd Lake	44	16	34	37
Cache La Poudre	10	6	0	8
Carter Lake	109	72	79	87
Chambers Lake	9	4	2	3
Cheesman	79	27	30	57
Cobb Lake	34	0	5	15
Eleven Mile	98	83	90	87
Fossil Creek	12	7	7	7
Gross	43	23	23	29
Halligan	6	3	2	4
Horsetooth	144	38	79	97
Lake Loveland	14	9	8	9
Lone Tree	9	5	3	7
Mariano	5	5	5	5
Marshall	10	2	4	4
Marston	17	16	16	15
Milton	24	13	16	13
Standley	42	19	28	17
Terry	8	6	6	5
Union	13	9	13	10
Windsor	19	7	9	10

* 1958-1972 period.

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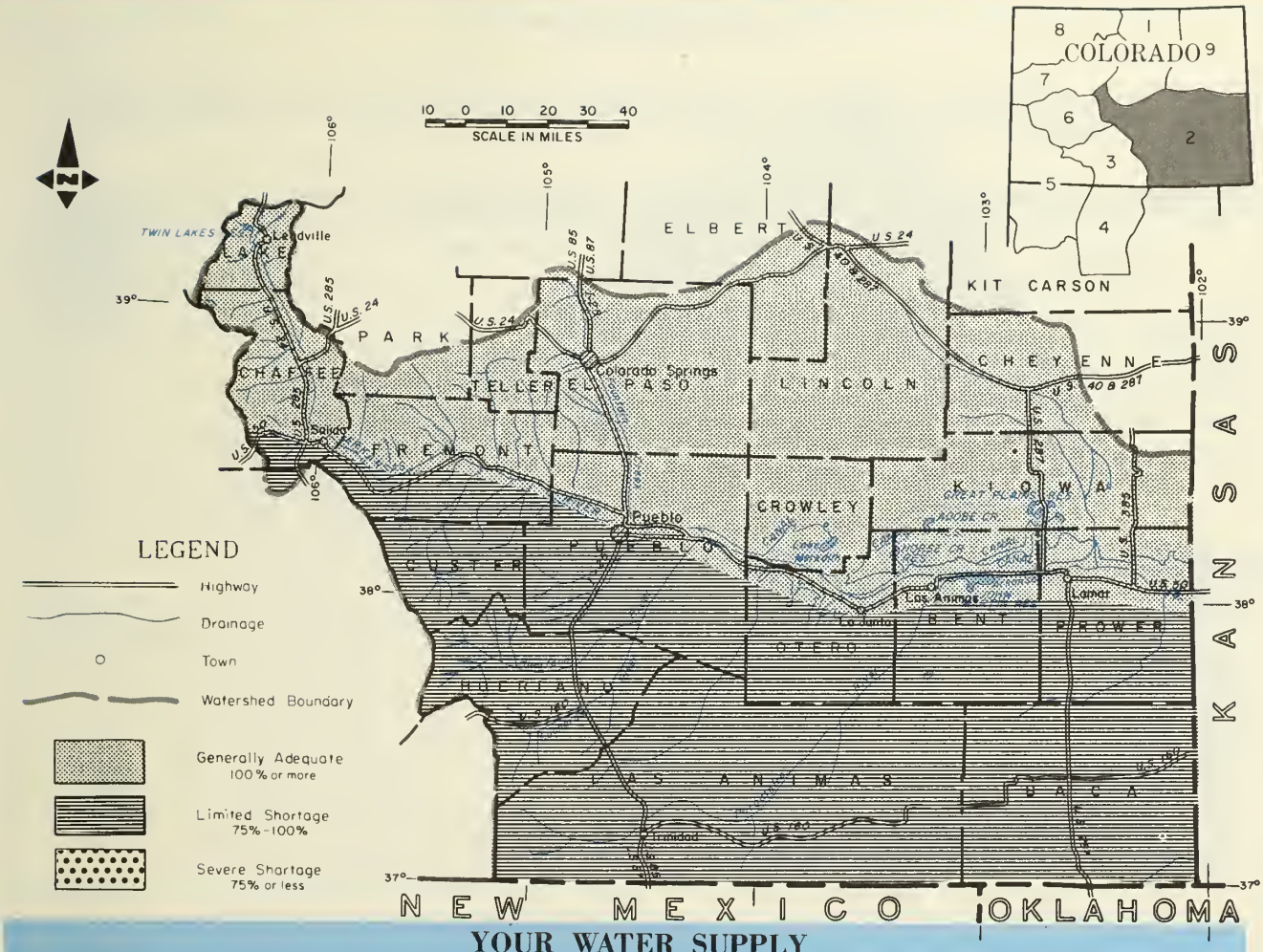
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE HEADWATERS OF THE ARKANSAS IS NEAR NORMAL AS OF MARCH FIRST. THE SOUTHERN TRIBUTARIES HAVE CONSIDERABLY LESS THAN AVERAGE SNOW. RESERVOIR CARRYOVER STORAGE IS POOR. SOIL MOISTURE IN THE IRRIGATED AREAS IS REPORTED AS POOR TO FAIR. CONSIDERABLY MORE SNOW IS NEEDED IN THIS BASIN TO INSURE ADEQUATE WATER THIS SUMMER.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D. W. GILLASPIE - AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Arkansas River near Pueblo (1)	305	105	290
Arkansas River at Salida (2)	338	108	313
Cucharas River near La Veta	7	70	10
Huerfano River near Redwing	11	73	15
Purgatoire River at Trinidad (3)	30	79	38

(1) Plus change in storage in Pueblo Reservoir. (2) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine ditches. (3) Change in storage in Trinidad Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Apishapa River	Fair	Poor
Fountain Creek	Avg.	Fair
Grape Creek	Fair	Poor
Hardscrabble Creek	Fair	Poor
Monument Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Arkansas	8	298	128
Cucharas	1	81	71
Purgatoire	1	100	80

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Adobe	62	0	0	17
Clear Creek	11	4	6	8
Cucharas	40	0	–	3
Great Plains	150	0	0	59
Horse Creek	27	0	11	7
John Martin	621	4	20	90
Meredith	42	0	0	13
Model	15	0	0	4
Turquoise	121	47	31	–
Twin Lakes	58	23	7	26
Pueblo	354	2	62	–

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

MARCH 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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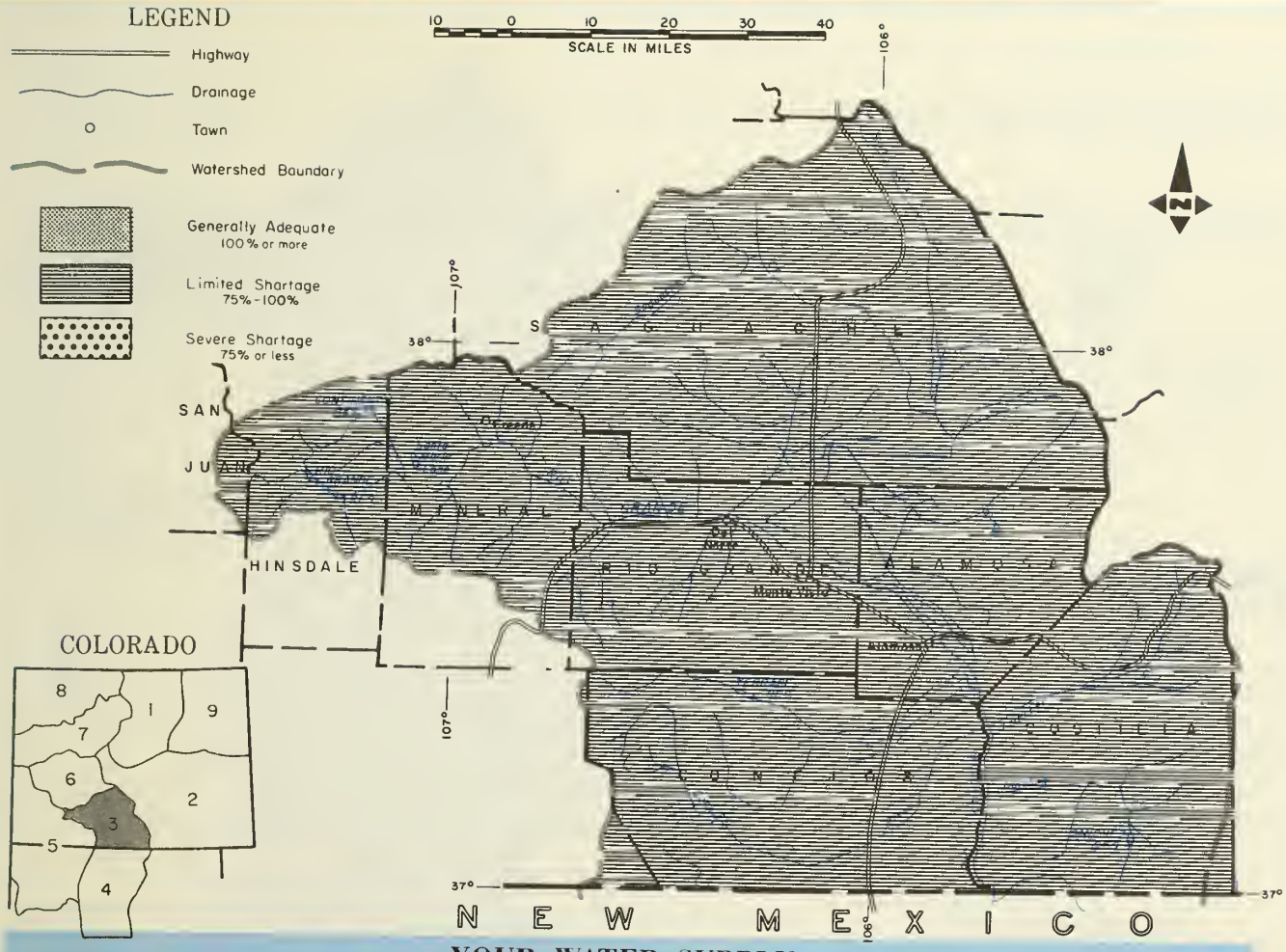

YOUR WATER SUPPLY

GOOD STORMS LATE IN FEBRUARY HAVE IMPROVED THE SNOWPACK OVER LAST MONTH, HOWEVER, MOST OF THE HEADWATERS REMAIN 20 TO 25% BELOW NORMAL. LOW ELEVATION SNOW IS LACKING. FORECASTS OF RUNOFF REFLECT THIS BELOW NORMAL SNOWPACK WITH MOST MAJOR STREAMS EXPECTED TO RUN ONLY 75% OF NORMAL. RESERVOIR STORAGE REMAINS BELOW AVERAGE. THE RIO GRANDE IS PROJECTED TO FLOW AT 75% OF AVERAGE.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

D W GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	* Average
Alamosa Creek above Terrace Reservoir	45	73	62
Conejos River near Mogote (1)	155	84	184
Culebra Creek at San Luis (2)	16	94	17
Rio Grande at 30 Mile Bridge (3)	90	74	121
Rio Grande near Del Norte (3)	350	75	467
South Fork of Rio Grande at South Fork	94	82	115

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Avg.	Fair
Sangre de Cristo Cr.	Avg.	Fair
Trinchera Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Alamosa	1	1300	76
Conejos	3	278	97
Culebra	2	150	105
Rio Grande	10	312	80

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Continental	27	5	2	5
Platoro	75	13	13	9
Rio Grande	46	6	3	17
Sanchez	103	5	4	13
Santa Maria	45	4	7	6
Terrace	18	0	4	6

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

MARCH 1, 1978

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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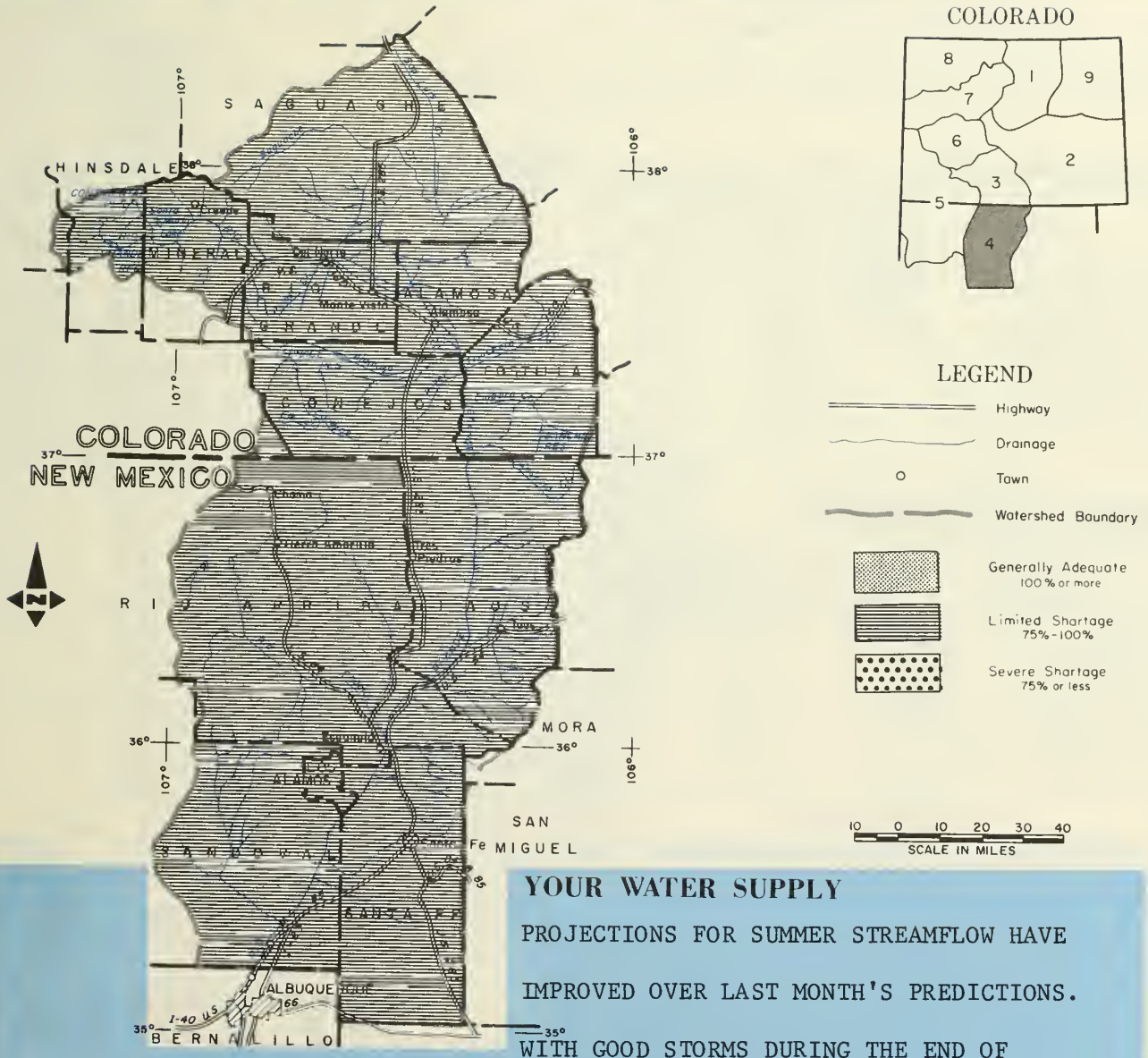

YOUR WATER SUPPLY

PROJECTIONS FOR SUMMER STREAMFLOW HAVE IMPROVED OVER LAST MONTH'S PREDICTIONS. WITH GOOD STORMS DURING THE END OF FEBRUARY WHICH IMPROVED THE MOUNTAIN SNOWPACK, MOST STREAMS ARE EXPECTED TO FLOW NEAR TO SLIGHTLY BELOW NORMAL. RUNOFF ON MANY SMALL STREAMS HAS BEGUN. RESERVOIR STORAGE REMAINS ONLY 58% OF NORMAL.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

A. W. HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

JAMES E. TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) March—July

FORECAST POINT	FORE-CAST	% of Average	Average *
Costilla Creek at Costilla (1)	20	105	19
Jemez River near Jemez	29	100	29
Pecos River at Pecos	35	85	41
Red River at Mouth near Questa	26	90	29
Rio Chama at El Vado	185	97	190
Rio Grande at Otowi (2)	425	81	526
Rio Grande at San Marcial (2)	300	85	355
Rio Hondo near Valdez	13	93	14
Santa Cruz River at Cundiyo	12	92	12

(1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Avg.	Fair
Mora River	Avg.	Fair
Nambe Creek	Avg.	Fair
Rio Ojo Caliante	Avg.	Fair
Rio Pueblo de Taos	Avg.	Fair
Santa Fe Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Pecos	1	97	103
Red River	2	145	91
Rio Chama	3	416	142
Rio Grande, NM	8	156	101
Rio Hondo	1	145	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average *
Avalon	5	2	4	--
Caballo	344	20	142	87
Conchas	273	108	84	186
El Vado	195	29	110	3
Elephant Butte	2195	230	343	439
McMillan	34	10	4	--
Sumner	111	48	26	79

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
MARCH 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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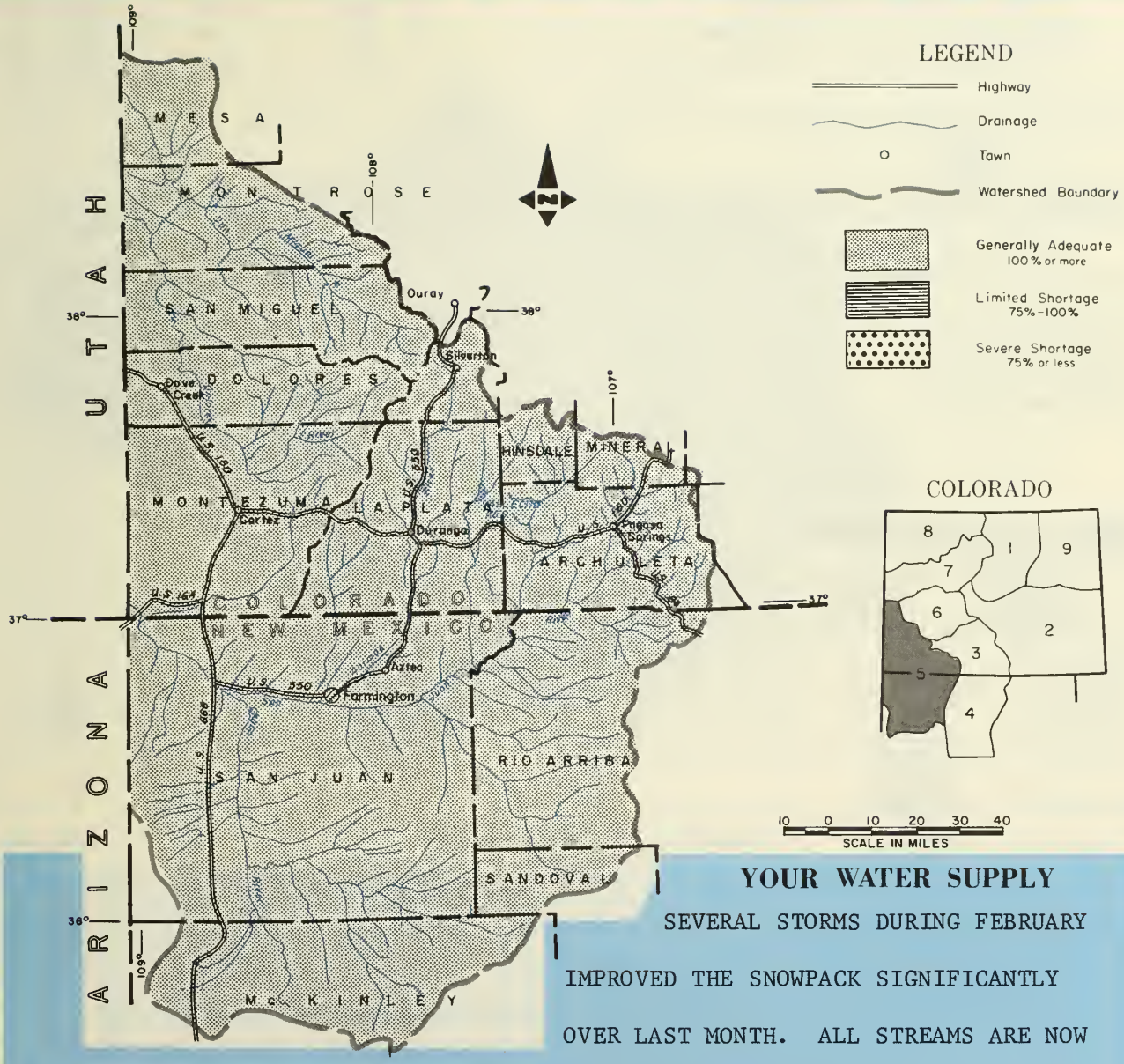

YOUR WATER SUPPLY

SEVERAL STORMS DURING FEBRUARY IMPROVED THE SNOWPACK SIGNIFICANTLY OVER LAST MONTH. ALL STREAMS ARE NOW FORECAST TO FLOW AT OR ABOVE NORMAL WITH THE EXCEPTION OF THE SAN JUAN WHICH SHOULD RUN 90% OF AVERAGE. RESERVOIR STORAGE REMAINS DEFICIENT. ONE MONTH REMAINS OF THE PRIMARY SNOW ACCUMULATION SEASON.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

A. W. HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D. W. GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E. TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Animas River at Durango	475	112	423
Dolores River at Dolores	267	115	232
La Plata River at Hesperus	26	108	24
Los Pinos River at Bayfield (1)	208	105	198
Mancos River near Towac (2)	16	114	14
Inflow to Navajo Reservoir (1 & 3)	600	101	597
Piedra Creek at Arboles	200	108	185
San Juan River at Carracas	320	90	354
San Miguel River at Placerville	150	115	130

(1) Observed flow plus change in storage in Vallecito Reservoir. (2) March-July. (3) April-July.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida River	Avg.	Avg.
Hermosa Creek	Avg.	Avg.
West Dolores River	Exc.	Avg.
Williams Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Animas	6	550	136
Dolores	4	472	132
San Juan	5	274	98

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Groundhog	22	7	7	9
Jackson Gulch	10	4	4	4
Lemon	40	5	17	19
Navajo	1696	936	1120	1203
Vallecito	126	22	47	54

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOWPACK ON THE GUNNISON RIVER BASIN IS NEAR NORMAL AND SHOULD PROVIDE NEAR AVERAGE STREAMFLOW THIS SUMMER. THE SNOWPACK ON GRAND MESA IS EXCELLENT. CARRYOVER STORAGE IN BLUE MESA RESERVOIR IS 238,000 ACRE FEET, A LOSS OF 150,000 ACRE FEET FROM LAST YEAR AT THIS TIME. TAYLOR RESERVOIR IS DOWN SLIGHTLY FROM LAST YEAR.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Gunnison River inflow to Blue Mesa Reservoir (1)	800	101	792
Gunnison River near Grand Junction (2)	1200	101	1184
North Fork of Gunnison (3)	300	114	263
Surface Creek near Cedaredge	19	119	16
Uncompahgre River at Colona	165	123	134

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ohio Creek	Avg.	Fair
Slate River	Avg.	Fair
Taylor River	Avg.	Fair
Tomichi Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Gunnison	12	371	129
Surface Creek	3	444	139
Uncompahgre	3	369	144

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Blue Mesa	830	238	394	354
Morrow Point	121	114	115	109
Taylor	106	32	57	65

* 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

MARCH 1, 1978

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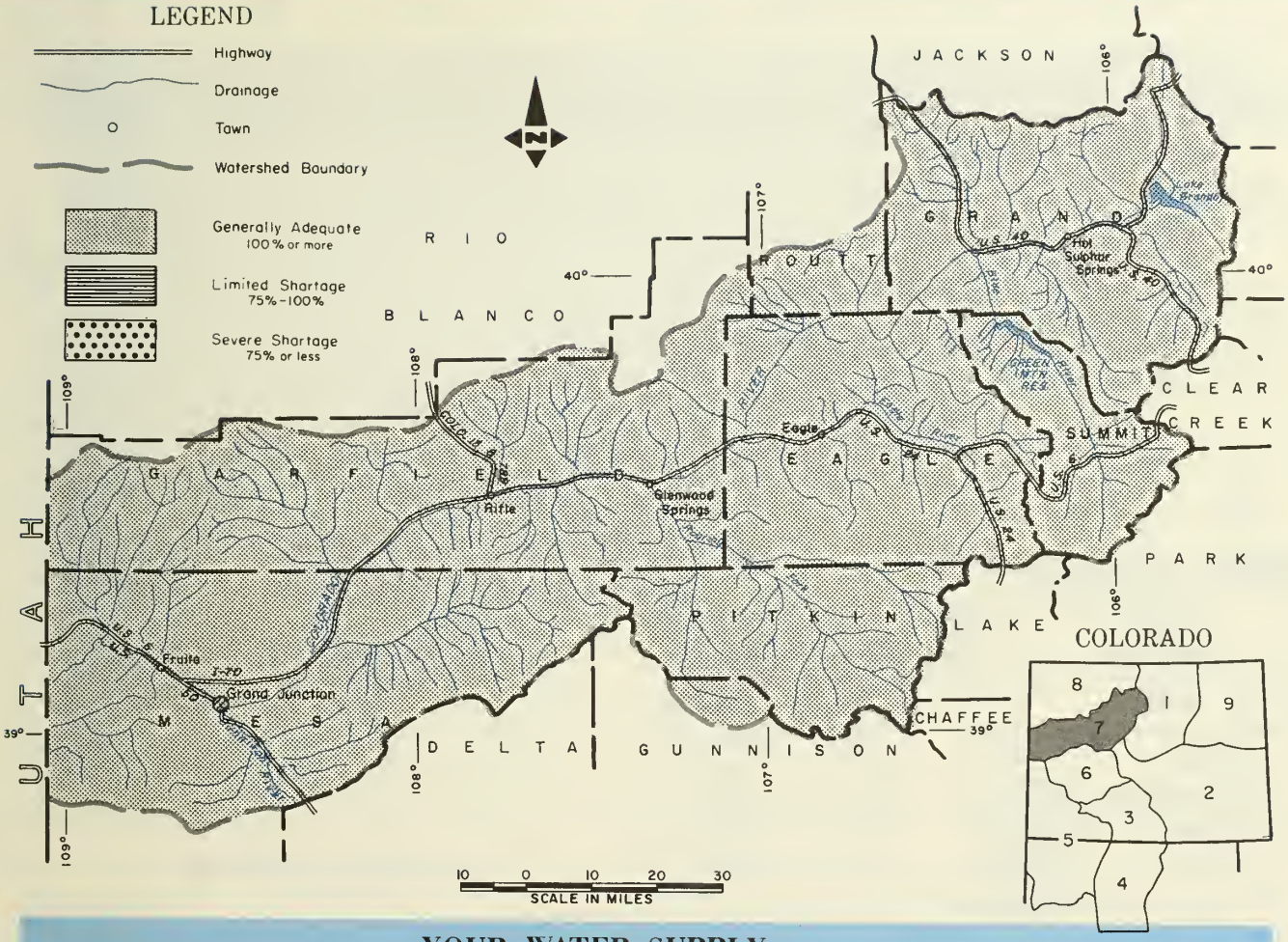

YOUR WATER SUPPLY

THE SNOWPACK THAT FEEDS THE MAINSTEM OF THE COLORADO AND ITS TRIBUTARIES IS EXCELLENT. THE SNOW RANGES UP TO 170% OF NORMAL AND SHOULD PROVIDE EXCELLENT RUNOFF THIS SUMMER. CARRYOVER STORAGE IS POOR, BUT SHOULD BE IMPROVED THIS YEAR. SOIL MOISTURE IN THE IRRIGATED VALLEYS IS REPORTED AS FAIR.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Blue River inflow to Dillon Reservoir	200	118	169
Blue River inflow to Green Mountain Reservoir (1)	360	121	297
Colorado River near Cameo (6)	2900	122	2370
Colorado River near Dotsero (3)	1800	126	1434
Colorado River inflow to Granby Reservoir (2)	290	127	228
Roaring Fork at Glenwood Springs (4)	740	104	713
Williams Fork near Parshall (5)	80	127	63
Willow Creek inflow to Willow Creek Reservoir	55	117	47

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Blue River	8	296	133
Colorado	19	337	141
Plateau	3	462	134
Roaring Fork	6	297	109
Williams Fork	3	273	133
Willow	2	357	122

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Dillon	254	117	210	233
Granby	466	50	191	235
Green Mountain	139	44	71	67
Homestake	43	0	23	17
Ruedi	101	76	68	65
Vega	32	1	6	11
Williams Fork	97	26	48	29
Willow Creek	9	7	6	7

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

MARCH 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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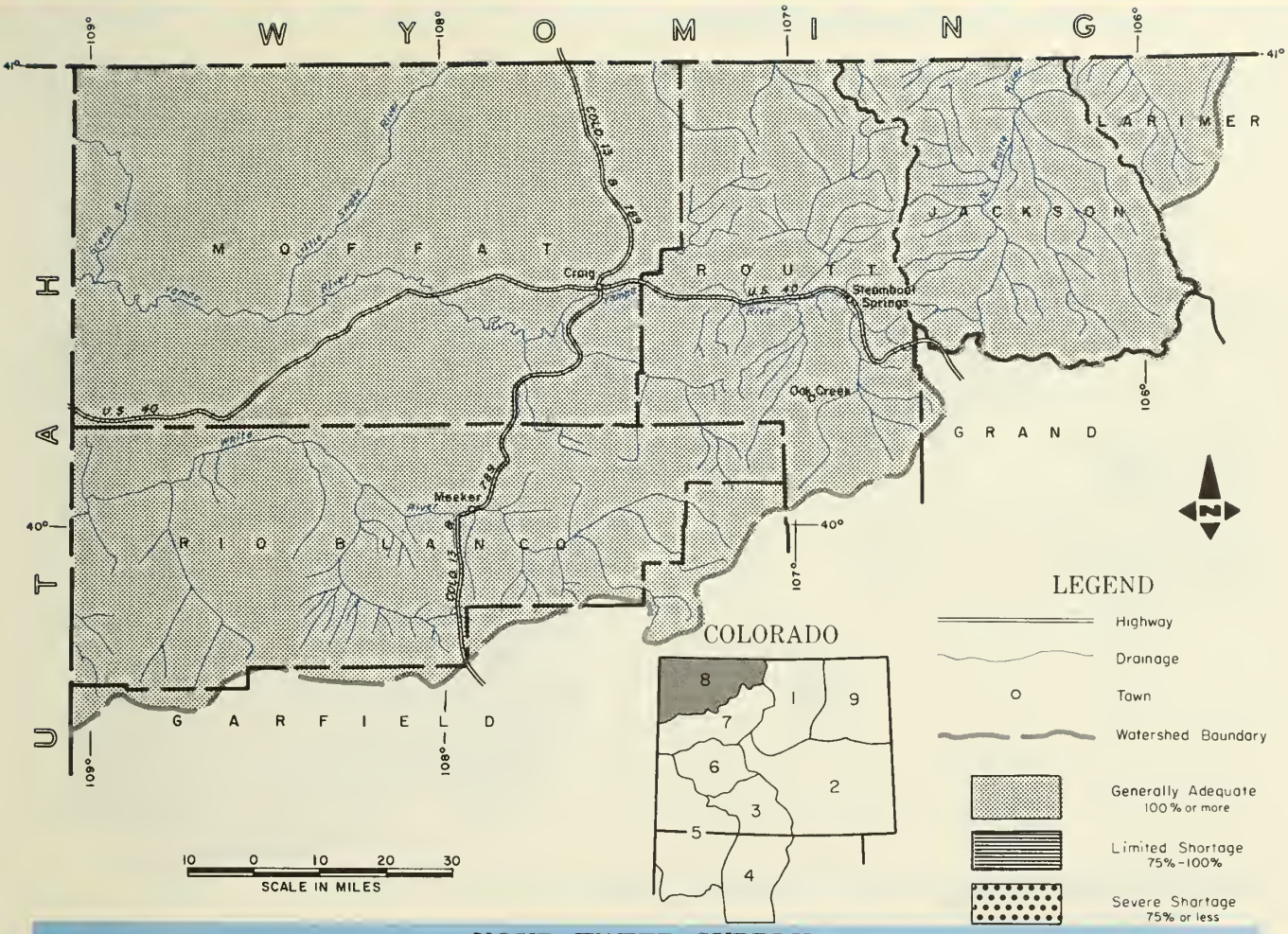

YOUR WATER SUPPLY

THE NORTHERN PORTION OF THE STATE HAS THE HIGHEST SNOWPACK IN THE STATE. A SNOW COURSE ABOVE STREAMBOAT SPRINGS IS APPROACHING THE MAXIMUM OF RECORD. SUMMER STREAMFLOW SHOULD BE EXCELLENT FOR ALL STREAMS ORIGINATING IN THIS AREA. EVEN THE SMALL STREAMS SHOULD PROVIDE GOOD WATER SUPPLIES THIS SUMMER.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Elk River at Clark	260	131	198
Laramie River near Woods	152	120	127
Little Snake River at Lily	410	127	324
North Platte River at Northgate	310	129	240
White River near Meeker	370	125	295
Yampa River near Maybell	1200	133	905
Yampa River at Steamboat Springs	360	131	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Exc.	Exc.
Hunt Creek	Exc.	Exc.
Illinois River	Exc.	Exc.
Michigan River	Exc.	Exc.
Oak Creek	Exc.	Exc.
Trout Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Elk	1	285	133
Laramie	2	321	115
North Platte	5	249	129
White	2	409	135
Yampa	6	271	142

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1978

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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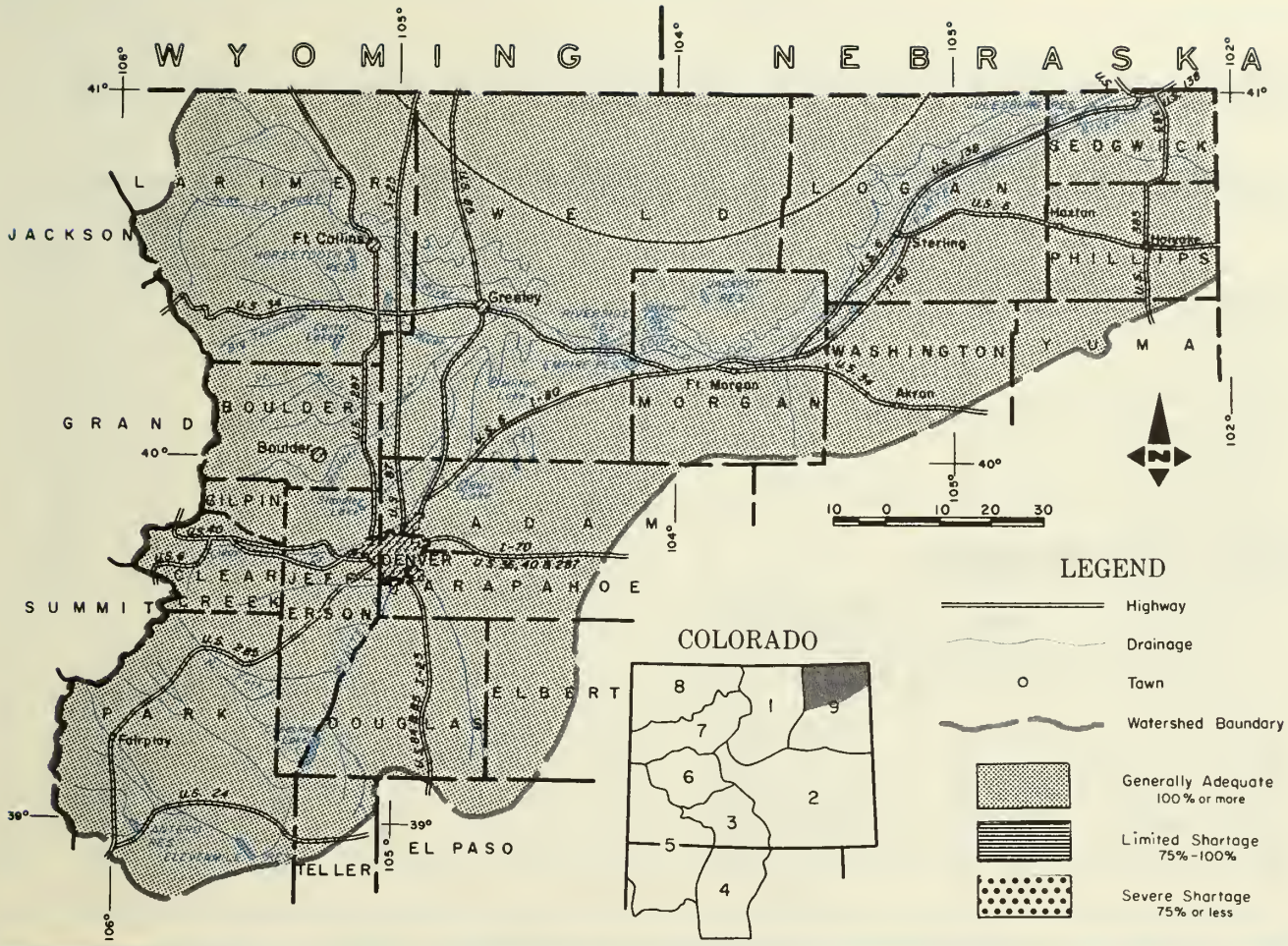

YOUR WATER SUPPLY

MARCH FIRST SNOW SURVEYS INDICATE A SNOWPACK AT THE HIGHER ELEVATIONS IN EXCESS OF 125% OF NORMAL. THIS SHOULD PROVIDE GOOD SUMMER FLOWS. CARRY-OVER STORAGE IS 75% OF NORMAL REFLECTING SOME OF LAST SUMMER'S DRAWDOWN. SOILS ON THE PLAINS ARE REPORTED AS DRY. ADDITIONAL MOISTURE ON THE PLAINS WOULD BE WELCOME.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M. ALT—AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	130	121	107
Boulder Creek at Orodell	60	122	49
Cache La Poudre River at Canyon Mouth (2)	310	126	247
Clear Creek at Golden (3)	160	127	127
Saint Vrain Creek at Lyons (4)	95	127	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through Berthoud Pass Ditch. (4) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Avg.	Fair
South Platte from Fort Morgan to Sterling	Avg.	Fair
South Platte below Sterling	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average*
Big Thompson	5	600	144
Boulder	3	320	124
Cache La Poudre	8	397	130
Clear Creek	5	226	128
Saint Vrain	3	475	136
South Platte	3	270	102

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average*
Carter	109	72	79	87
Cheesman	79	27	30	57
Eleven Mile	98	83	90	87
Empire	38	23	31	30
Horsetooth	144	38	79	97
Jackson	35	29	32	32
Julesburg	28	20	21	20
Point of Rocks	70	58	62	59
Prewitt	33	14	27	18
Riverside	58	34	42	53

* 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of MARCH 1, 1978

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	AVG 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	2/27	48	15.4	3.9	14.1
McIntyre	NS	--	---	---	---
Roach	2/27	58	18.0	6.5	14.9
North Platte River					
Cameron Pass	3/01	82	29.1	10.9	22.5
Columbine Lodge	2/27	80	30.9	10.9	20.4
Northgate	3/01	28	6.1	2.1	5.5
Park View	2/28	36	8.0	2.5	7.8
Willow Cr. Pass (B)	2/28	48	12.0	3.8	10.4
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	2/27	25	6.6	3.6	6.2
Boulder Falls	2/27	48	13.1	3.8	10.3
University Camp	2/26	67	19.6	4.9	15.1
Big Thompson River					
Deer Ridge	3/28	28	7.8	0.3	4.0
Hidden Valley	3/01	49	12.9	2.1	8.1
Lake Irene (B)	2/25	75	25.9	5.8	19.0
Long's Peak	2/24	36	11.6	1.8	8.5
Two Mile	3/01	56	15.8	2.4	11.9
Cache La Poudre					
Bennett Creek	2/28	31	6.9	1.1	---
Big South	2/28	14	2.9	0.7	2.3
Cameron Pass	3/01	82	29.1	10.9	22.5
Chambers Lake	2/28	44	13.5	1.0	8.1
Deadman Hill	2/27	48	15.4	3.9	14.1
Hourglass Lake	2/28	31	7.9	1.4	5.3
Joe Wright	3/01	82	27.1	11.6	---
Lost Lake	2/28	47	14.0	3.0	10.2
Red Feather	2/27	26	7.1	0.9	5.4
Clear Creek					
Baltimore (B)	2/27	25	6.6	3.6	6.2
Berthoud Falls	2/27	49	13.6	6.0	11.6
Empire	2/27	27	6.1	3.4	6.0
Grizzly Peak (B)	2/27	66	21.0	8.7	14.6
Loveland Lift	Discontinued			11.7	16.9
Loveland Pass	2/27	56	18.4	7.4	12.7
St. Vrain River					
Copeland Lake	2/28	26	6.5	0.9	3.8
Ward	2/24	22	5.2	2.0	4.8
Wild Basin	2/28	50	13.5	2.4	9.9
South Platte River					
Como	2/23	22	4.0	1.6	---
Geneva Park	2/25	11	2.5	0.5	3.3
Horseshoe Mt.	2/24	34	9.9	3.2	---
Hoosier Pass	2/24	39	12.7	4.7	10.6
Jefferson Creek	2/23	35	6.7	2.9	7.6
Mosquito	2/24	37	11.0	3.8	---
Trout Creek Pass	2/27	10	2.0	1.1	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	2/28	15	3.1	6.2	5.1
Cooper Hill (B)	2/27	49	11.6	4.7	9.0
East Fork	2/27	41	10.8	3.5	8.0
Four Mile Park	2/27	22	5.1	1.8	5.1
Fremont Pass	2/27	62	18.8	6.2	12.9
Garfield	2/28	38	11.4	4.2	11.3
Hermit Lake	2/27	20	5.6	3.2	---
Monarch Pass	2/28	52	16.6	6.5	14.0
Tennessee Pass	2/27	45	12.2	4.0	8.7
Twin Lakes Tunnel	2/27	45	12.9	2.5	8.9
Westcliffe	2/29	16	4.0	3.8	6.0

NOTE: NS - No Survey
(B) - On Adjacent Drainage

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	AVG 58-72
Cucharas River					
Apishapa	2/27	17	4.4	4.5	---
Cucharas Creek	2/27	19	5.1	5.4	---
La Veta Pass (B)	2/27	21	5.1	6.3	7.2
Purgatoire River					
Bourbon	2/27	22	4.7	4.7	5.9
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	2/28	17	3.9	0.3	5.1
Conejos River					
Cumbres	2/22	58	17.1	5.7	16.5
La Manga	2/22	45	12.0	4.0	---
Platoro	2/27	34	9.5	4.2	13.9
River Springs	2/28	14	3.5	---	5.0
Culebra River					
Brown Cabin	2/28	23	6.0	2.6	---
Cottonwood (B)	2/28	22	4.9	2.1	---
Culebra	2/24	41	10.2	3.9	7.4
La Veta Pass (B)	2/27	21	5.1	6.3	7.2
Trinchera (B)	2/27	24	5.0	4.0	---
Rio Grande					
Cochetopa Pass	2/24	19	5.0	1.6	4.8
Grayback	2/24	32	8.9	3.1	---
Hiway	2/27	49	15.5	4.2	19.5
Lake Humphrey	2/25	17	3.4	1.7	6.1
Love Lake	2/27	27	6.0	0.9	---
Pass Creek	2/27	24	6.5	2.3	9.9
Pool Table	2/27	13	2.8	0.9	6.0
Porcupine	2/27	29	6.9	2.5	9.1
Santa Maria	2/27	19	4.3	1.2	4.1
Upper Rio Grande	2/27	27	6.6	2.1	7.6
Wolf Creek Pass	2/27	57	19.3	5.8	22.0
Wolf Cr. Summit (B)	2/27	57	18.2	5.2	22.5
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela	2/24	14	3.4	3.5	3.3
Rio Chama					
Bateman	2/24	42	11.7	3.5	9.3
Chama Divide	2/23	24	6.9	0.6	3.0
Chamita	2/23	32	9.3	2.6	7.3
Rio Grande					
Alamitos	2/28	17	4.2	4.5	---
Big Tesuque	2/28	19	5.3	3.2	4.9
Cordova	2/27	28	7.5	5.5	9.6
Elk Cabin	2/27	13	2.9	1.0	3.1
Gallegos Peak	2/28	30	6.4	---	---
Hopewell	2/24	45	13.2	4.7	---
La Cueva	2/27	23	4.5	4.4	---
Palo	2/23	24	6.0	3.2	---
Payrole	NS	--	---	3.8	7.8
Quemazon	2/27	25	6.4	4.9	7.8
Rio En Medio	2/28	30	8.4	5.9	8.0
Sandoval	2/27	15	3.9	3.6	4.5
Senorita Divide	3/01	30	8.9	4.6	---
Taos Canyon	2/23	16	4.3	2.9	3.8
Tres Ritos	2/28	13	3.5	3.0	4.6
North Costilla	2/27	20	4.6	3.2	---
Rio Hondo					
Taos Powderhorn	2/24	58	17.4	12.0	---
Red River					
Hematite Park (B)	2/22	13	3.0	2.3	3.5
Red River #2	2/22	23	5.4	3.5	5.7

APPENDIX I

SNOW COURSE MEASUREMENTS as of MARCH 1, 1978

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES) LAST YEAR	WATER CONTENT (INCHES) AVG 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	2/27	39	12.1	2.6	10.0
Lemon	2/28	28	7.7	2.2	---
Mineral Creek	2/27	51	15.4	3.1	12.9
Molas Lake	2/27	46	13.4	2.8	11.2
Purgatory	2/27	60	18.4	4.1	---
Red Mt. Pass (B)	2/27	88	29.6	7.3	25.4
Silverton Sub-Sta.	2/27	33	8.9	1.0	6.7
Spud Mountain	2/27	63	21.6	4.4	19.7
Dolores River					
Lizard Head	2/27	58	17.4	3.2	13.9
Lone Cone	2/28	53	16.0	4.2	---
Ophir Loop	2/27	54	16.0	5.2	---
Rico	2/27	31	8.2	0.8	7.2
Telluride	2/27	36	10.2	2.9	6.7
Trout Lake	2/27	53	16.9	4.2	11.8
San Juan River					
Chama Divide (B)	2/23	24	6.9	0.6	3.0
Chamita (B)	2/23	32	9.3	2.6	7.3
Upper San Juan	2/27	72	24.4	7.2	24.5
Wolf Cr. Pass (B)	2/27	58	19.3	5.8	22.0
Wolf Cr. Summit	2/27	57	18.2	5.2	22.5
GUNNISON BASIN					
Gunnison River					
Alexander Lake	2/27	78	24.5	6.1	17.4
Blue Mesa	2/27	34	10.0	3.3	6.9
Butte	2/27	57	15.9	4.5	---
Cochetopa Pass (B)	2/24	19	5.0	1.6	4.8
Crested Butte	2/27	56	15.8	4.8	10.3
Keystone	2/27	76	23.7	5.8	16.7
Lake City	2/23	28	7.1	1.3	7.0
Mesa Lakes (B)	2/23	61	19.2	4.0	13.5
McClure Pass	2/24	44	13.4	4.0	14.7
Park Cone	2/28	40	9.2	1.9	8.8
Park Reservoir	2/27	87	26.5	5.7	19.5
Porphyry Creek	2/28	56	17.5	5.8	13.7
Tomichi	2/28	47	13.8	5.8	10.5
Surface Creek					
Alexander Lake	2/27	78	24.5	6.1	17.4
Mesa Lakes	2/23	61	19.2	4.0	13.5
Park Reservoir	2/27	87	26.5	5.7	19.5
Uncompahgre River					
Ironton Park	2/27	47	16.2	6.7	11.3
Red Mountain Pass	2/27	88	29.6	7.3	25.4
Telluride (B)	2/27	52	16.6	2.9	6.7
COLORADO BASIN					
Blue River					
Blue River	2/23	33	7.5	3.5	7.4
Fremont Pass	2/27	62	18.8	6.2	12.9
Officers Gulch	2/27	31	8.2	0.0	6.4
Grizzly Peak	2/27	66	21.0	8.7	14.6
Hoosier Pass (B)	2/24	39	12.7	4.7	10.6
Shrine Pass	2/23	59	19.8	6.9	14.5
Snake River	2/27	42	10.7	3.1	7.0
Summit Ranch	2/27	35	8.5	3.1	7.0

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES) LAST YEAR	WATER CONTENT (INCHES) AVG 58-72
Colorado River					
Arrow	2/28	49	12.7	4.2	10.5
Berthoud Pass	2/24	52	16.9	6.0	12.8
Berthoud Summit	2/27	65	20.8	9.2	15.4
Cooper Hill	2/27	49	11.6	4.2	9.0
Fiddler Gulch	Discontinued			---	14.0
Glenmar Ranch	2/28	38	9.2	3.4	7.0
Gore Pass	2/27	45	13.0	3.2	8.6
Grand Lake	2/25	41	11.7	2.9	7.0
Lake Irene	2/25	75	25.9	5.8	19.0
Lapland	2/28	39	10.6	2.7	9.0
Lulu	2/25	71	26.1	7.6	14.9
Lynx Pass	2/27	51	14.8	4.1	10.5
McKenzie Gulch	2/23	24	5.1	2.2	5.5
Middle Fork	2/28	41	10.4	3.8	8.1
Milner	2/25	52	17.0	3.8	---
North Inlet	2/27	47	12.5	2.9	7.6
Pando	2/23	39	10.3	2.2	8.2
Phantom Valley	2/25	46	15.2	3.4	9.3
Ranch Creek	2/28	40	10.4	2.8	7.8
Tennessee Pass (B)	2/27	45	12.2	4.0	8.7
Vail	2/22	74	23.8	---	---
Vasquez	2/28	47	12.9	4.6	10.2
Roaring Fork					
Aspen	2/25	52	16.1	5.8	14.0
Independence Pass	2/25	49	15.7	7.6	13.9
Ivanhoe	NS	--	---	6.7	13.9
Kiln	2/27	50	12.6	4.0	---
Lift	2/25	50	15.9	5.0	13.6
McClure Pass	2/24	44	13.4	4.0	14.7
Nast	2/27	34	8.0	2.4	5.5
North Lost Trail	2/24	42	12.8	2.8	13.3
Williams Fork River					
Glenmar Ranch	2/28	38	9.2	3.4	7.0
Jones Pass	2/24	52	16.4	6.0	11.9
Middle Fork	2/28	41	10.4	3.8	8.1
Willow Creek					
Granby	2/28	37	8.7	2.0	6.5
Willow Cr. Pass	2/28	48	12.0	3.8	10.4
Plateau Creek					
Mesa Lakes	2/23	61	19.2	4.0	13.5
Park Reservoir	2/27	87	26.5	5.7	19.5
Trickle Divide	2/27	86	26.9	6.0	21.0
YAMPA BASIN					
Elk River					
Elk River	2/28	67	21.1	7.4	15.9
Hahn's Peak	2/28	59	17.7	6.0	---
White River					
Burro Mountain	2/28	64	19.5	5.0	15.0
Rio Blanco	2/27	64	18.5	4.3	13.1
Yampa River					
Bear River	2/28	47	12.3	3.2	---
Columbine (B)	2/27	80	30.9	10.9	20.4
Crosho	No Survey			---	---
Dry Lake	2/27	75	25.2	7.6	17.8
Lynx Pass (B)	2/27	51	14.8	4.1	10.5
Rabbit Ears	2/27	89	30.3	9.5	21.8
Tower	2/27	163	61.8	16.6	---
Yampa View	2/27	52	16.9	6.3	13.0

NOTE: NS - No Survey
(B) - On Adjacent Drainage

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

- Colorado State Engineer
- New Mexico State Engineer
- Nebraska State Engineer
- Colorado State University Experiment Station
- Rocky Mountain Forest and Range Experiment Station
- New Mexico Dept. of Game and Fish

FEDERAL

- Department of Agriculture
  - Forest Service
  - Soil Conservation Service
- Department of Interior
  - Bureau of Reclamation
  - Geological Survey
  - National Park Service
  - Indian Service
- Department of Commerce
  - NOAA, National Weather Service
- Defense Department
  - Army Engineer Corps
- Atomic Energy Comission

INVESTOR OWNED UTILITIES

- Colorado Public Service Company
- Public Service Company of New Mexico

MUNICIPALITIES

- City of Denver
- City of Boulder
- City of Greeley
- City of Fort Collins

WATER USERS ORGANIZATIONS

- Arkansas Valley Ditch Association
- Colorado River Water Conservation District

IRRIGATION PROJECTS

- Farmers Reservoir and Irrigation Company
- San Luis Valley Irrigation District
- Santa Maria Reservoir Company
- Costilla Land Company
- Uncompahgre Valley Water Users' Association
- Twin Lakes Reservoir and Canal Company
- Trinchera Irrigation Co.

CORPORATIONS

- Aspen Skiing Corp.
- Colorado Fuel and Iron Corp.
- Climax Molybdenum Corp.
- Lake Eldora Corp.
- Vail Associates, Incorporated
- Vermejo Park Corp. (NM)
- Taylor Lumber and Land Company

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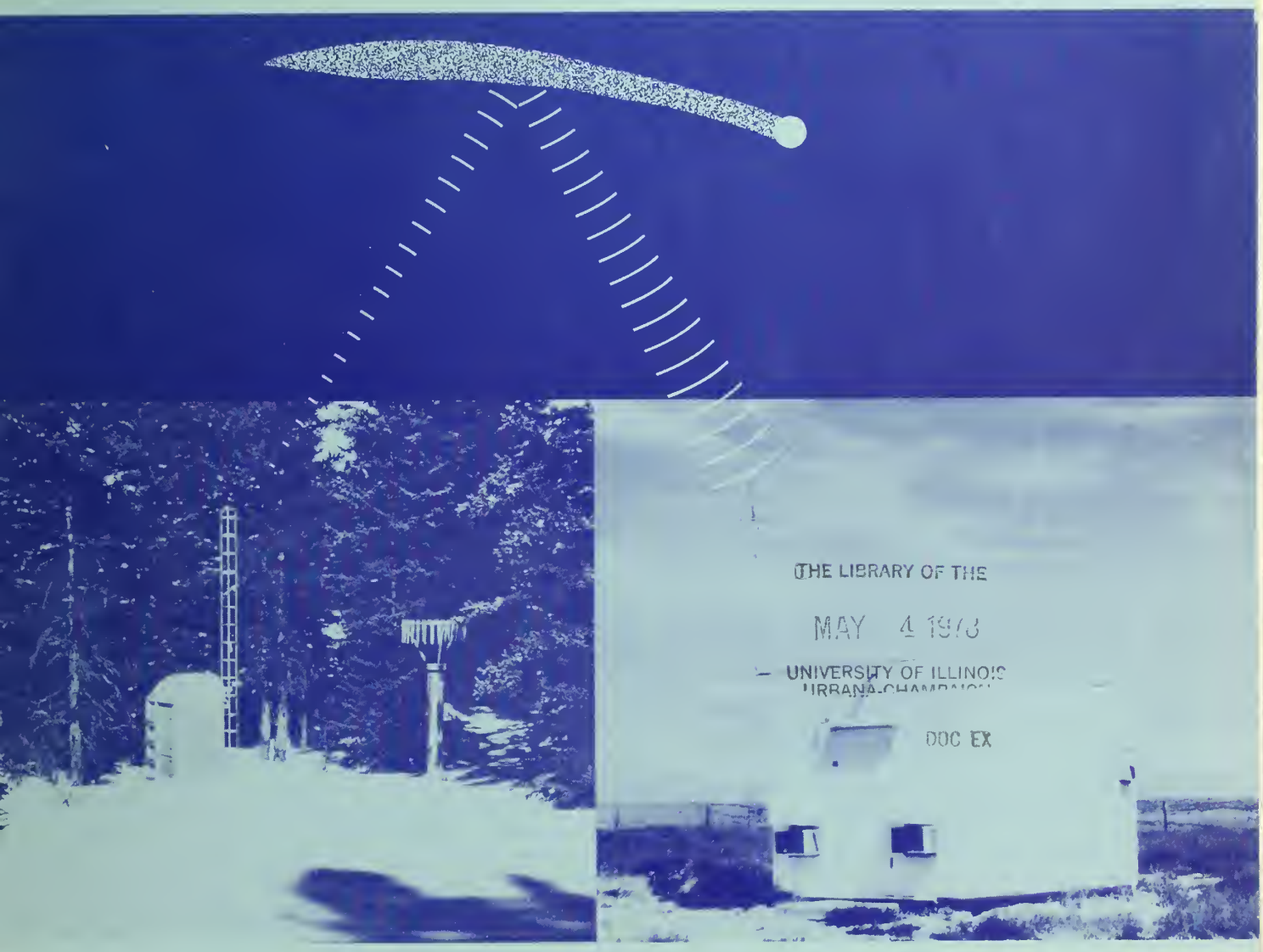
WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO



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Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
APR. 1, 1978

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SOME OF THE DATA IN THIS REPORT HAVE BEEN RECEIVED THROUGH THE SOIL CONSERVATION SERVICE'S NEW SNOTEL SYSTEM WHICH TRANSMITS INFORMATION VIA THE SPACE AGED METEOR BURST METHOD FROM DATA SITES TO MASTER STATIONS LIKE THESE.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
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Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

ROBERT G. HALSTEAD

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
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ALBERT W. HAMELSTROM

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
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C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
BERNARD A. SHAFER, Assistant Snow Survey Supervisor
JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek,and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1978

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
APRIL 1, 1978

WATER SUPPLIES SHOULD RANGE FROM NEAR AVERAGE TO EXCELLENT IN ALL AREAS OF COLORADO AND NEW MEXICO. APRIL FIRST SNOW SURVEYS SHOW SIGNIFICANT IMPROVEMENTS IN THE SNOWPACK FOR THE SOUTHWESTERN PORTIONS OF COLORADO AND PORTIONS OF THE RIO GRANDE DRAINAGE. RESERVOIR STORAGE REMAINS WELL BELOW NORMAL BUT THERE SHOULD BE SUFFICIENT RUNOFF TO REPLENISH STORED WATER IN ALL BUT THE LARGEST RESERVOIRS. SOIL MOISTURE IN IRRIGATED AREAS RANGES ALL THE WAY FROM POOR TO EXCELLENT.

COLORADO-- STORMS DURING MARCH DUMPED HEAVY AMOUNTS OF PRECIPITATION IN THE SOUTHWESTERN MOUNTAINS AND THE EFFECT EXTENDED INTO THE CENTRAL AND NORTHERN MOUNTAINS. A MAXIMUM OF RECORD, 175 INCHES OF SNOW WITH 75.7 INCHES OF WATER, WAS MEASURED NEAR STEAMBOAT SPRINGS IN THE PARK RANGE. STREAMFLOWS ARE EXPECTED TO RANGE FROM SLIGHTLY BELOW NORMAL IN THE RIO GRANDE DRAINAGE TO A HIGH OF 146% OF NORMAL ON THE YAMPA RIVER. FRONT RANGE STREAMFLOW FORECASTS HAVE DECREASED FROM LAST MONTH TO ABOUT 115% OF NORMAL. THE COLORADO RIVER AND TRIBUTARIES SHOULD FLOW 30% ABOVE NORMAL.

NEW MEXICO-- A HIGHLY VARIABLE SNOWPACK IS APPARENT IN THE NORTHERN HALF OF THE STATE. IT RANGES FROM NEAR NORMAL IN THE SOUTHERN SANGRE DE CRISTO RANGE TO ABOUT 160% OF NORMAL ON THE HEADWATERS OF THE RIO CHAMA RIVER. PROJECTIONS OF WATER SUPPLY ARE MORE OPTIMISTIC THAN LAST MONTH WITH ALL STREAMS EXPECTED TO FLOW AT NORMAL LEVELS OR ABOVE. THE RIO GRANDE MAINSTEM SHOULD SUPPLY BETWEEN 10 AND 15% GREATER THAN NORMAL FLOWS. THE RIO CHAMA IS FORECAST TO FLOW AT NEAR 130% OF AVERAGE.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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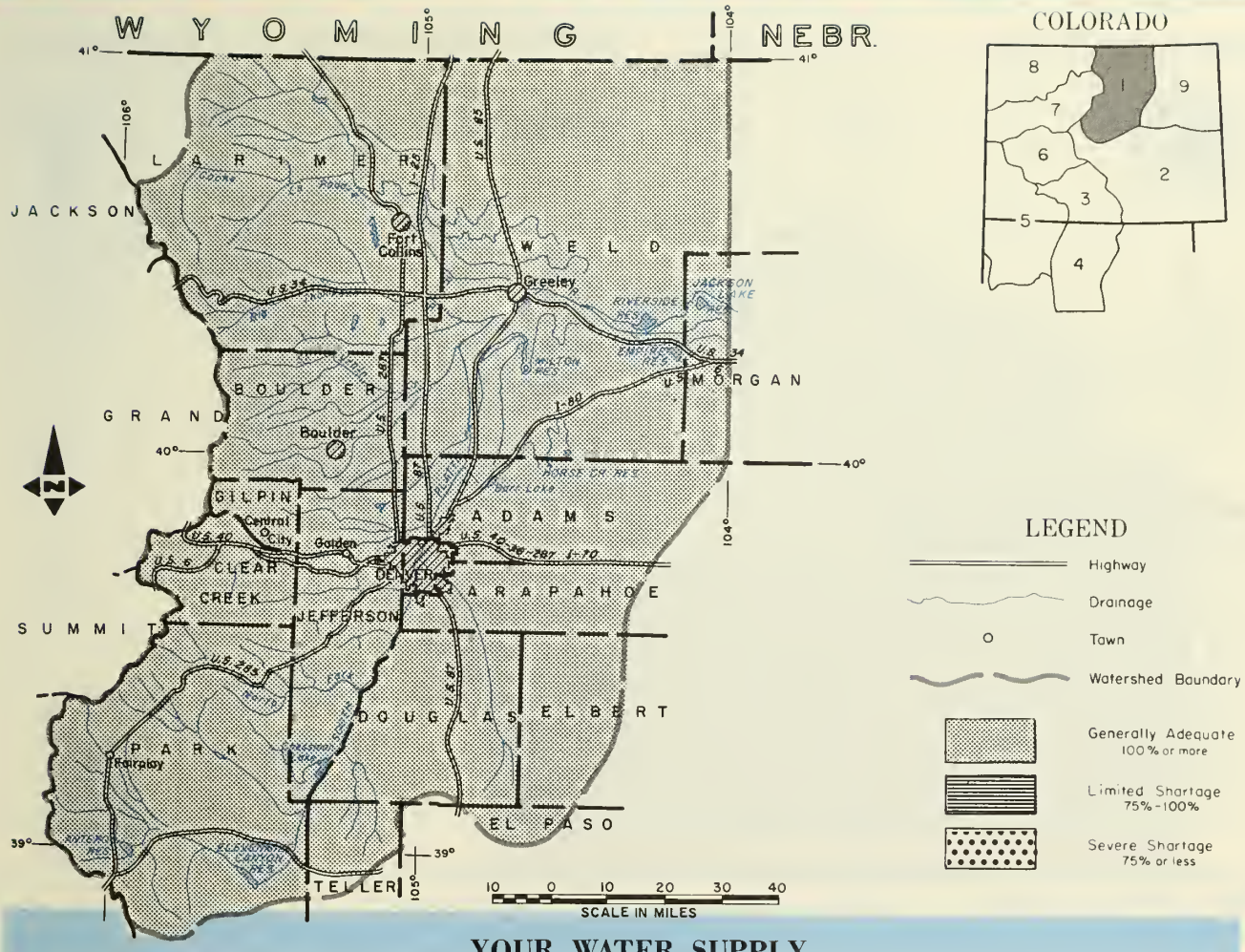

YOUR WATER SUPPLY

THE SNOWPACK HAS DECREASED SLIGHTLY FROM 130% ON THE SOUTH PLATTE STREAMS TO 120% THIS MONTH. STREAMFLOW FORECASTS WERE ALSO DROPPED PROPORTIONATELY. THERE IS STILL SOME TIME REMAINING TO IMPROVE THE SNOWPACK. CARRYOVER STORAGE IS 75% OF NORMAL, AND CAN PROVIDE SOME SUPPLEMENTAL SUPPLIES. SOIL MOISTURE ALONG THE FRONT RANGE IS REPORTED AS FAIR TO GOOD.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

RODNEY M. ALT—AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Big Thompson River at Drake (1)	120	112	107
Boulder Creek at Orodell	55	112	49
Cache La Poudre River at Canyon Mouth (2)	290	117	247
Clear Creek at Golden (3)	150	118	127
St. Vrain Creek at Lyons	85	113	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Avg.	Avg.
Coal Creek	Avg.	Avg.
North Fork of South Platte	Avg.	Avg.
North Fork of Cache La Poudre	Avg.	Avg.
Ralston Creek	Avg.	Avg.
Rock Creek	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Big Thompson	5	378	122
Boulder	3	234	112
Cache La Poudre	7	281	120
Clear Creek	5	212	128
Saint Vrain	3	412	121
South Platte	3	226	104

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Antero	16	15	16	14
Barr Lake	32	20	29	25
Black Hollow	8	3	4	4
Boyd Lake	44	16	34	38
Cache La Poudre	10	7	0	8
Carter Lake	109	89	94	95
Chambers Lake	9	4	1	3
Cheesman	79	27	33	59
Cobb Lake	34	0	5	15
Eleven Mile	98	83	90	88
Fossil Creek	12	7	9	8
Gross	43	23	23	28
Halligan	6	4	3	5
Horsetooth	144	50	90	111
Lake Loveland	14	9	8	10
Lone Tree	9	6	3	7
Mariano	5	5	5	5
Marshall	10	2	4	5
Marston	17	16	17	15
Milton	24	13	19	14
Standley	42	22	30	19
Terry	8	6	6	5
Union	13	10	13	10
Windsor	19	8	10	12
Ralph Price	15	10	10	--

* 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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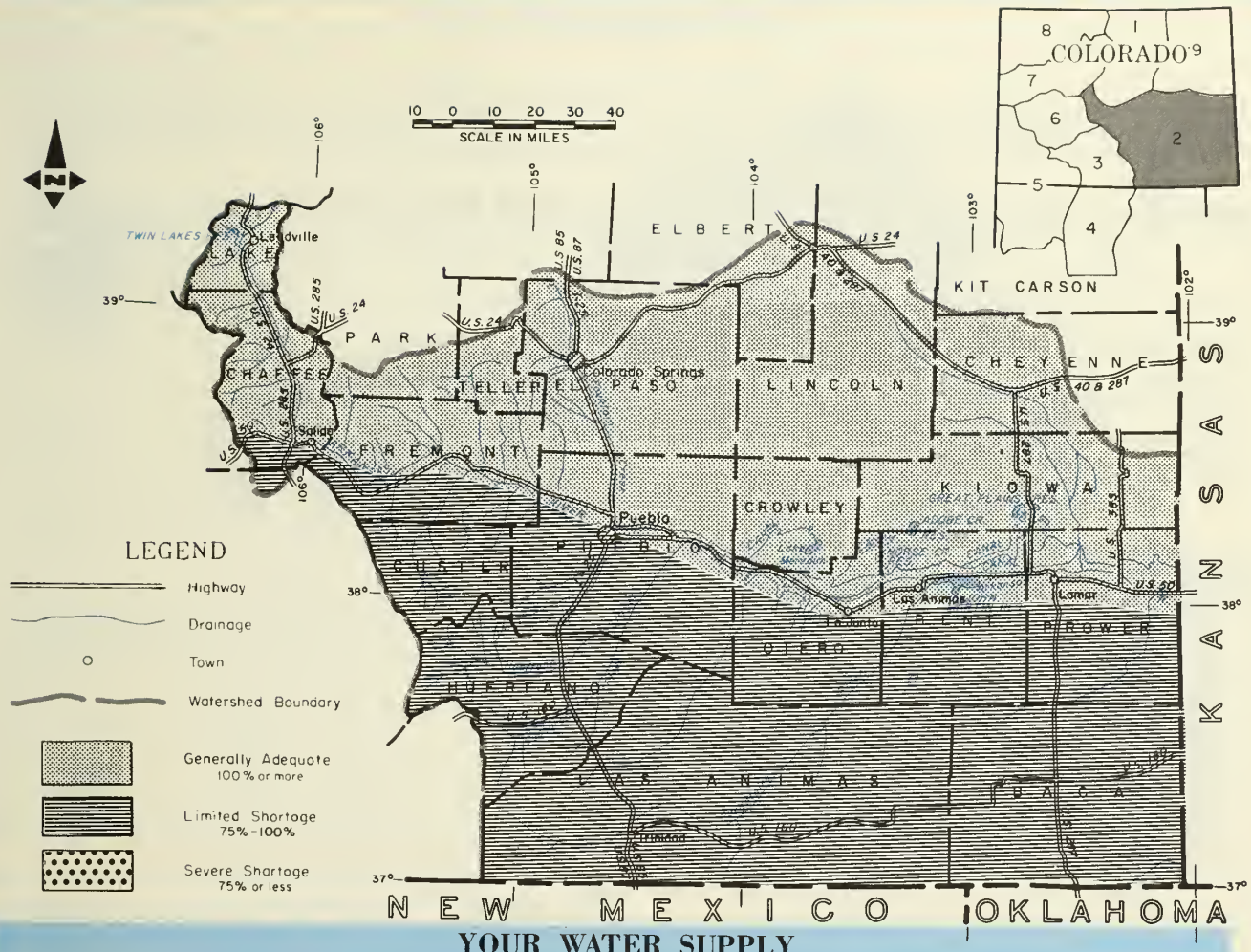

YOUR WATER SUPPLY

THE OVERALL SNOWPACK IS SIMILAR TO LAST MONTH. FORECASTS FOR SUMMER STREAMFLOW ARE NEAR NORMAL. CARRYOVER STORAGE IS PRACTICALLY NON-EXISTENT, SO SOME WATER SHORTAGES COULD EXIST THIS SUMMER. SOIL MOISTURE CONDITIONS ARE REPORTED AS FAIR ABOVE PUEBLO, AND POOR BELOW PUEBLO EXCEPT AROUND ROCKY FORD. HERE CONDITIONS ARE REPORTED AS GOOD. MUCH MORE SNOW AND PRECIPITATION ARE NEEDED.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

D. W. GILLASPIE - AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Arkansas River near Pueblo (1)	320	110	290
Arkansas River at Salida (2)	340	109	313
Cucharas River near La Veta	9	90	10
Huerfano River near Redwing	12	80	15
Purgatoire River at Trinidad (3)	35	92	38

(1) Plus change in storage in Pueblo Reservoir. (2) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine ditches. (3) Change in storage in Trinidad Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa River	Avg.	Fair
Fountain Creek	Avg.	Fair
Grape Creek	Avg.	Fair
Hardscrabble Creek	Avg.	Fair
Monument Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Arkansas	10	219	114
Cucharas	1	114	104
Purgatoire	1	131	97

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average *
Adobe	62	0	0	17
Clear Creek	11	4	6	8
Cucharas	40	0	0	3
Great Plains	150	0	0	61
Horse Creek	27	0	10	7
John Martin	621	6	21	91
Meredith	42	0	0	14
Model	15	0	0	4
Turquoise	121	47	26	--
Twin Lakes	58	20	7	26
Pueblo	354	2	61	--

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

APRIL 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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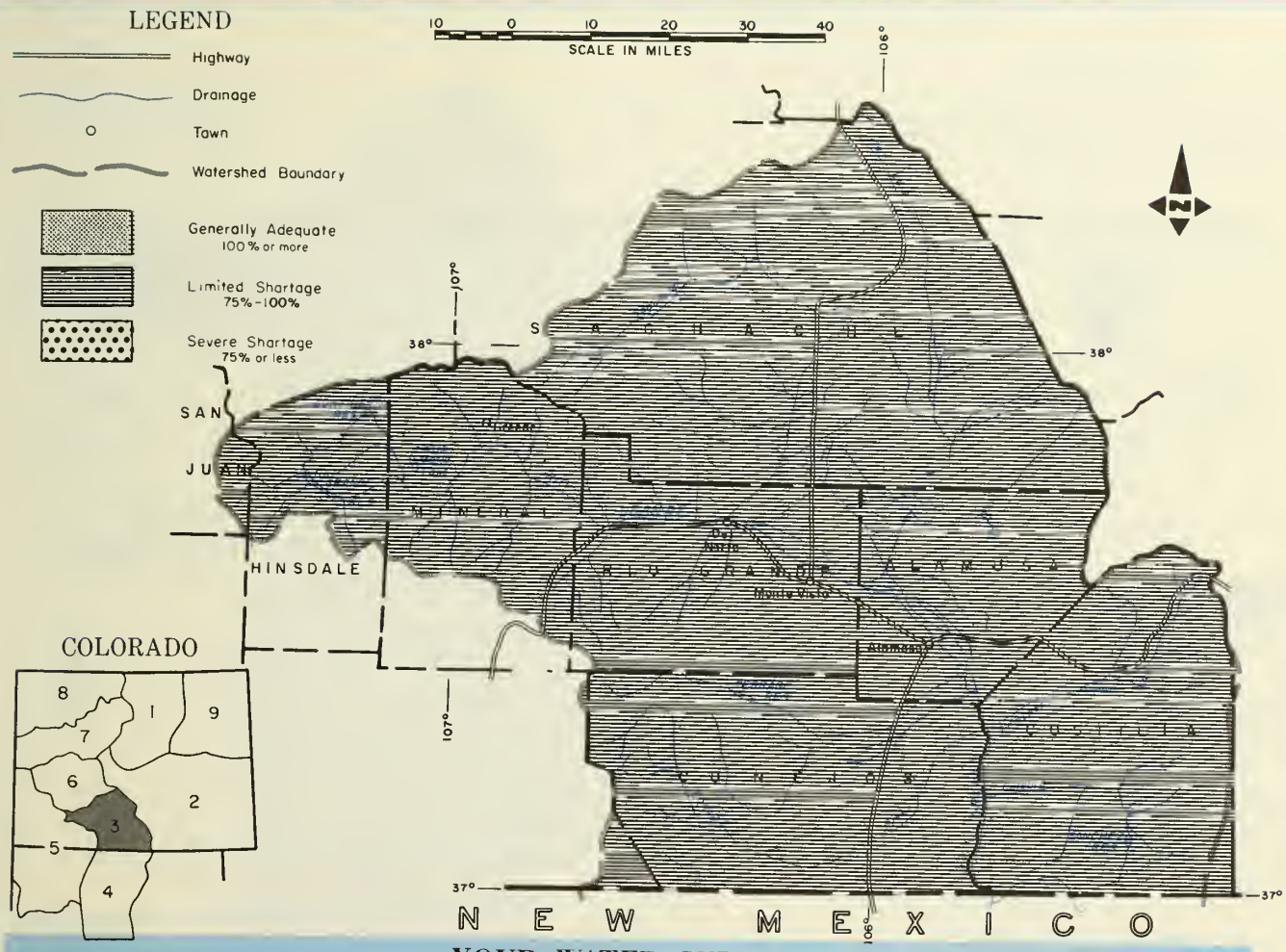

YOUR WATER SUPPLY

HEAVY SNOWS THE FIRST PART OF MARCH HAVE PRODUCED A SIGNIFICANT IMPROVEMENT IN THE MOUNTAIN SNOWPACK. BASIN AVERAGES NOW RANGE FROM NEAR NORMAL TO A HIGH OF 146% OF NORMAL ON THE CULEBRA DRAINAGE. LOW ELEVATION SNOW IS DEFICIENT AND HAS DISAPPEARED IN MOST AREAS. STREAMFLOWS ARE EXPECTED TO BE NEAR NORMAL ON MOST WATERSHEDS EXCEPT THE CULEBRA WHICH SHOULD BE WELL ABOVE NORMAL. RESERVOIR STORAGE REMAINS 40% BELOW NORMAL.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

D. W. GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	* Average
Alamosa Creek above Terrace Reservoir	50	81	62
Conejos River near Mogote (1)	175	95	184
Culebra Creek at San Luis (2)	22	130	17
Rio Grande at 30 Mile Bridge (3)	105	87	121
Rio Grande near Del Norte (3)	400	86	468
South Fork of Rio Grande at South Fork	100	87	115

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Avg.	Fair
Sangre de Cristo Cr.	Avg.	Fair
Trinchera Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Alamosa	1	---	66
Conejos	3	414	113
Culebra	2	195	146
Rio Grande	10	336	93

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Continental	27	5	2	6
Platoro	60	13	13	9
Rio Grande	46	7	4	18
Sanchez	103	6	5	14
Santa Maria	45	4	8	7
Terrace	18	1	4	6

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

APRIL 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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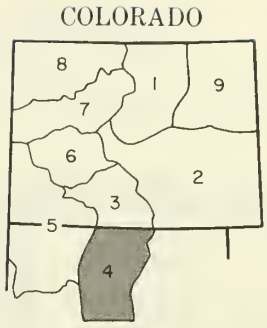

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75% - 100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

A FAVORABLE OUTLOOK FOR NEARLY ALL STREAMS IS EXPECTED AS A RESULT OF HEAVY SNOWS DURING MARCH. ALTHOUGH HEADWATERS OF THE RIO GRANDE IN COLORADO HAVE ONLY ABOUT NORMAL SNOWCOVER, MOST NEW MEXICO WATERSHEDS HAVE SNOWPACK 10 TO 60% ABOVE NORMAL. THIS FORTUNATE CIRCUMSTANCE SHOULD PRODUCE NEAR NORMAL STREAMFLOWS ON MOST WATERSHEDS.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

A. W. HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

JAMES E. TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) March—July

FORECAST POINT	FORE-CAST	% of Average	Average *
Costilla Creek at Costilla (1)	24	126	19
Jemez River near Jemez	38	131	29
Pecos River at Pecos	40	98	41
Red River at Mouth near Questa	32	110	29
Rio Chama at El Vado	250	132	190
Rio Grande at Otowi (2)	600	114	526
Rio Grande at San Marcial (2)	400	113	355
Rio Hondo near Valdez	18	128	14
Santa Cruz River at Cundiyo	15	115	13

(1) Observed flow plus change in Costillo Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Avg.	Fair
Mora River	Avg.	Fair
Nambe Creek	Avg.	Fair
Rio Ojo Caliante	Exc.	Exc.
Rio Pueblo de Taos	Exc.	Avg.
Santa Fe Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Pecos	1	100	100
Red River	1	227	143
Rio Chama	3	671	160
Rio Grande, NM	8	195	111
Rio Hondo	1	171	---

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average *
Avalon	5	2	4	--
Caballo	344	23	81	65
Conchas	273	107	83	184
El Vado	195	45	111	6
Elephant Butte	2195	241	351	394
McMillan	34	10	14	--
Sumner	111	48	2	63

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
APRIL 1, 1978

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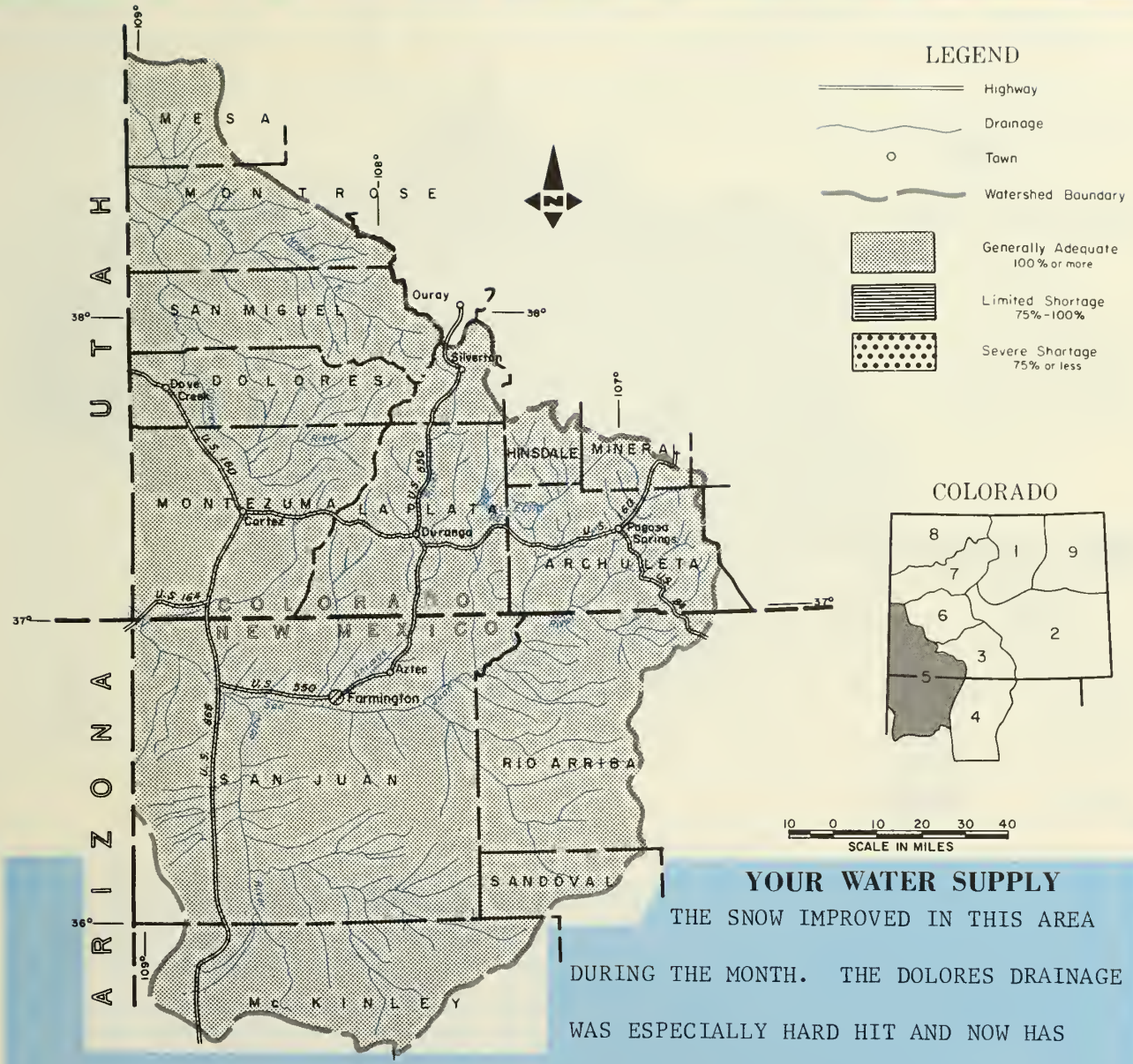

YOUR WATER SUPPLY

THE SNOW IMPROVED IN THIS AREA DURING THE MONTH. THE DOLORES DRAINAGE WAS ESPECIALLY HARD HIT AND NOW HAS 159% OF NORMAL SNOW. IF TEMPERATURES TURN WARM AND REMAIN SO FOR A FEW DAYS, SOME HIGH WATER ALONG LOW DRAINAGES CAN BE EXPECTED. CERTAINLY WATER SUPPLIES SHOULD BE ADEQUATE. CARRYOVER STORAGE IS 78% OF NORMAL.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

A. W. HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

D. W. GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E. TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Animas River at Durango	575	136	423
Dolores River at Dolores	325	140	232
La Plata River at Hesperus	34	142	24
Los Pinos River at Bayfield (1)	232	117	198
Mancos River near Towac (2)	19	136	14
Inflow to Navajo River (1 & 3)	750	126	597
Piedra Creek at Arboles	225	122	185
San Juan River at Carracas	400	113	354
San Miguel River at Placerville	180	138	130

(1) Observed flow plus change in storage in Vallecito Reservoir. (2) March-July. (3) April-July.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida River	Exc.	Exc.
Hermosa Creek	Exc.	Exc.
West Dolores River	Exc.	Exc.
Williams Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Animas	6	486	137
Dolores	4	652	159
San Juan	5	385	115

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Groundhog	22	7	7	10
Jackson Gulch	10	4	–	5
Lemon	40	5	17	20
Navajo	1696	959	1102	1192
Vallecito	126	25	48	57

* 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOWPACK IN THE GUNNISON BASIN IS EXCELLENT AND SHOULD PROVIDE ADEQUATE WATER THIS SUMMER. STREAMFLOW FORECASTS RANGE FROM A LOW OF 117% ON THE MAINSTEM TO 142% ON THE UNCOMPAHGRE. SNOW ON GRAND MESA IS ESPECIALLY GOOD. CARRYOVER STORAGE IS 78% OF NORMAL. SOIL MOISTURE IS REPORTED AS FAIR IN THE IRRIGATED AREAS.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Gunnison River inflow to Blue Mesa Reservoir (1)	925	117	793
Gunnison River near Grand Junction (2)	1600	132	1184
North Fork of Gunnison (3)	350	133	263
Surface Creek near Cedaredge	21	131	16
Uncompahgre River at Colona	190	142	134

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ohio Creek	Exc.	Exc.
Slate River	Exc.	Exc.
Taylor River	Exc.	Exc.
Tomichi Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Gunnison	12	346	140
Surface Creek	3	412	154
Uncompahgre	3	312	151

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Blue Mesa	830	243	380	315
Morrow Point	121	115	115	114
Taylor	106	29	55	65

* 1958-1972 period

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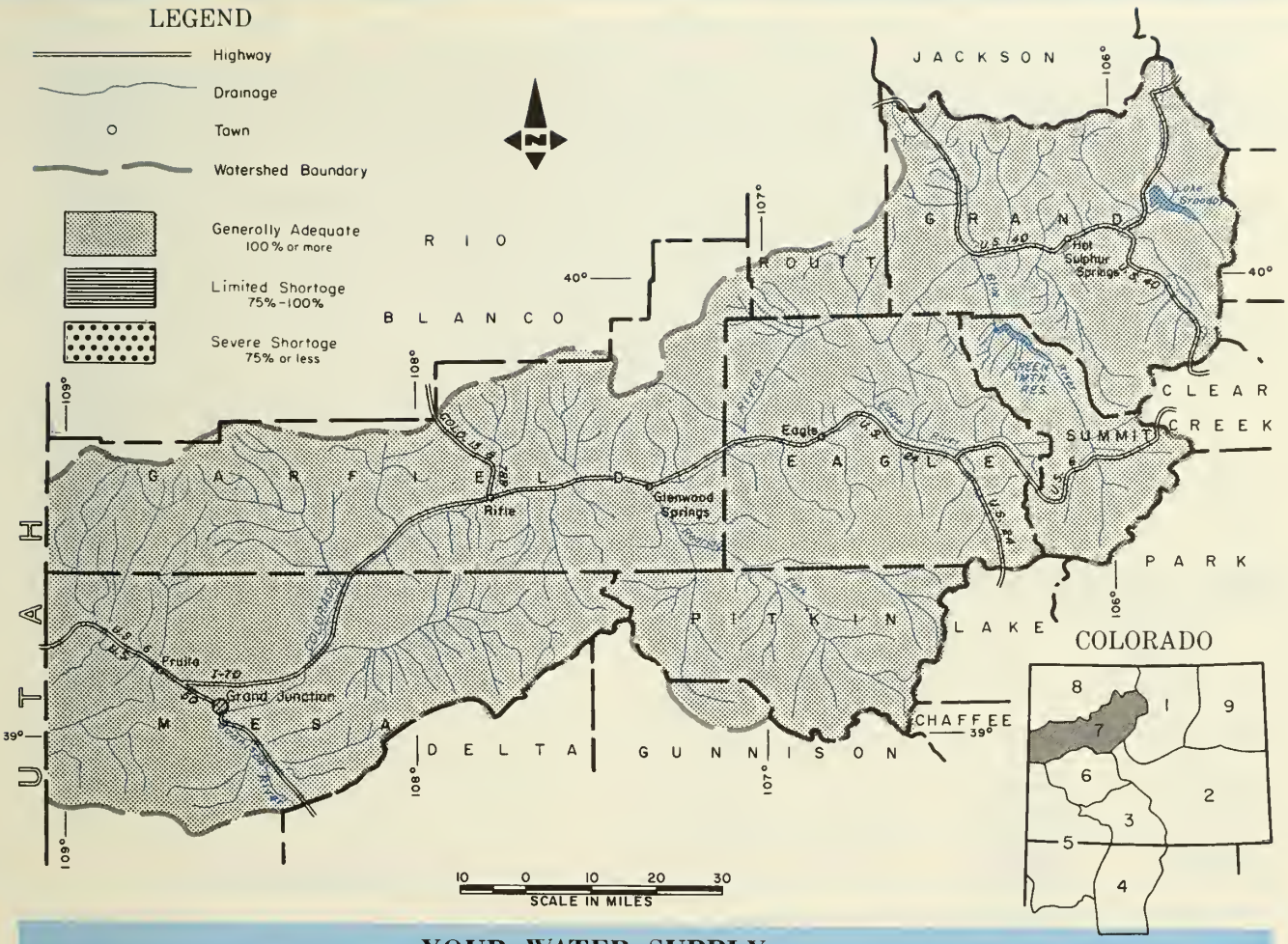
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
APRIL 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS ARE UP SLIGHTLY FROM A MONTH AGO. CURRENT SNOWPACK SHOULD PROVIDE EXCELLENT WATER SUPPLIES THIS SUMMER. THERE IS STILL ANOTHER MONTH WHEN SNOW CAN FALL IN THE HIGH COUNTRY. CARRYOVER STORAGE IS ONLY 47% OF THE 15-YEAR AVERAGE, SO WON'T PROVIDE TOO MUCH SUPPLEMENTAL WATER. SOIL MOISTURE CONDITIONS RANGE FROM FAIR TO GOOD IN THE IRRIGATED AREAS.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Blue River inflow to Dillon Reservoir	220	130	169
Blue River inflow to Green Mountain Reservoir (1)	380	128	297
Colorado River near Cameo (6)	3100	131	2370
Colorado River near Dotsero (3)	1850	129	1434
Colorado River inflow to Granby Reservoir (2)	300	132	228
Roaring Fork at Glenwood Springs (4)	800	112	713
Williams Fork near Parshall (5)	80	127	63
Willow Creek inflow to Willow Creek Reservoir	60	128	47

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels olus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Exc.	Exc.
Eagle River	Exc.	Exc.
Gypsum Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Blue River	8	238	131
Colorado	19	254	136
Plateau	3	411	151
Roaring Fork	7	233	126
Williams Fork	3	193	130
Willow	2	232	122

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average*
Dillon	254	111	203	231
Granby	466	23	161	213
Green Mountain	139	40	69	54
Homestake	43	0	20	15
Ruedi	101	65	68	59
Vega	32	--	6	12
Williams Fork	97	26	46	25
Willow Creek	9	6	6	6

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

APRIL 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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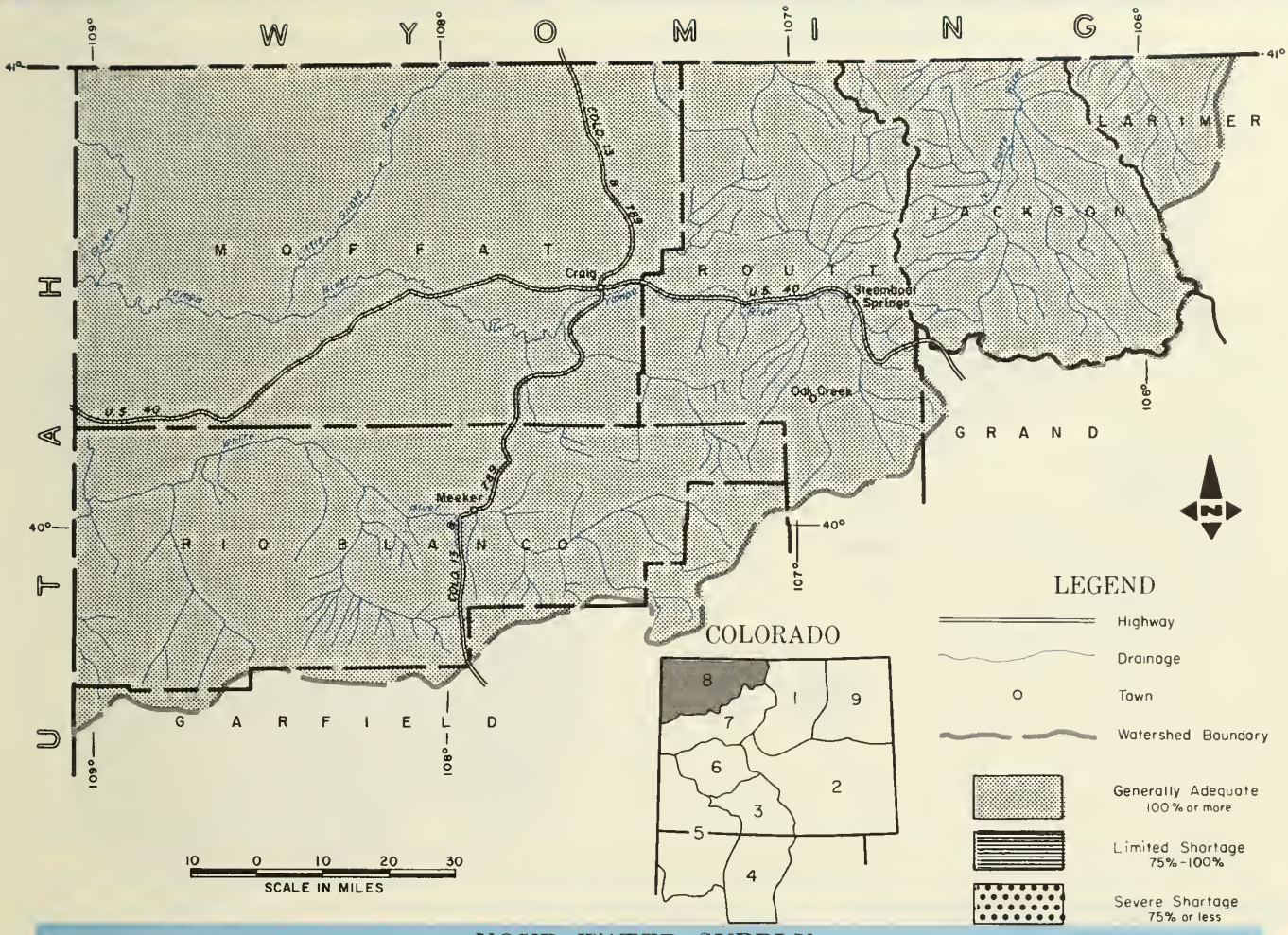

YOUR WATER SUPPLY

THESE BASINS IN THE NORTHERN THIRD OF THE STATE HAVE THE HIGHEST SNOWPACK IN COLORADO. A NUMBER OF SNOW COURSES ARE THE MAXIMUM OF RECORD. THE TOWER SNOW COURSE HAS 175 INCHES OF SNOW CONTAINING 75.7 INCHES OF WATER, THE HIGHEST EVER RECORDED IN COLORADO. MANY LOW AREAS WILL EXPERIENCE HIGH WATER THIS SUMMER. SOIL MOISTURE IS REPORTED AS GOOD.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Elk River at Clark	280	141	198
Laramie River near Woods	150	118	127
Little Snake River at Lily	550	170	324
North Platte River at Northgate	310	129	240
White River near Meeker	400	136	295
Yampa River near Maybell	1300	144	905
Yampa River at Steamboat Springs	400	146	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Exc.	Exc.
Hunt Creek	Exc.	Exc.
Illinois River	Exc.	Exc.
Michigan River	Exc.	Exc.
Oak Creek	Exc.	Exc.
Trout Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Elk	2	290	157
Laramie	3	237	121
North Platte	5	200	121
White	2	289	144
Yampa	6	258	144

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
APRIL 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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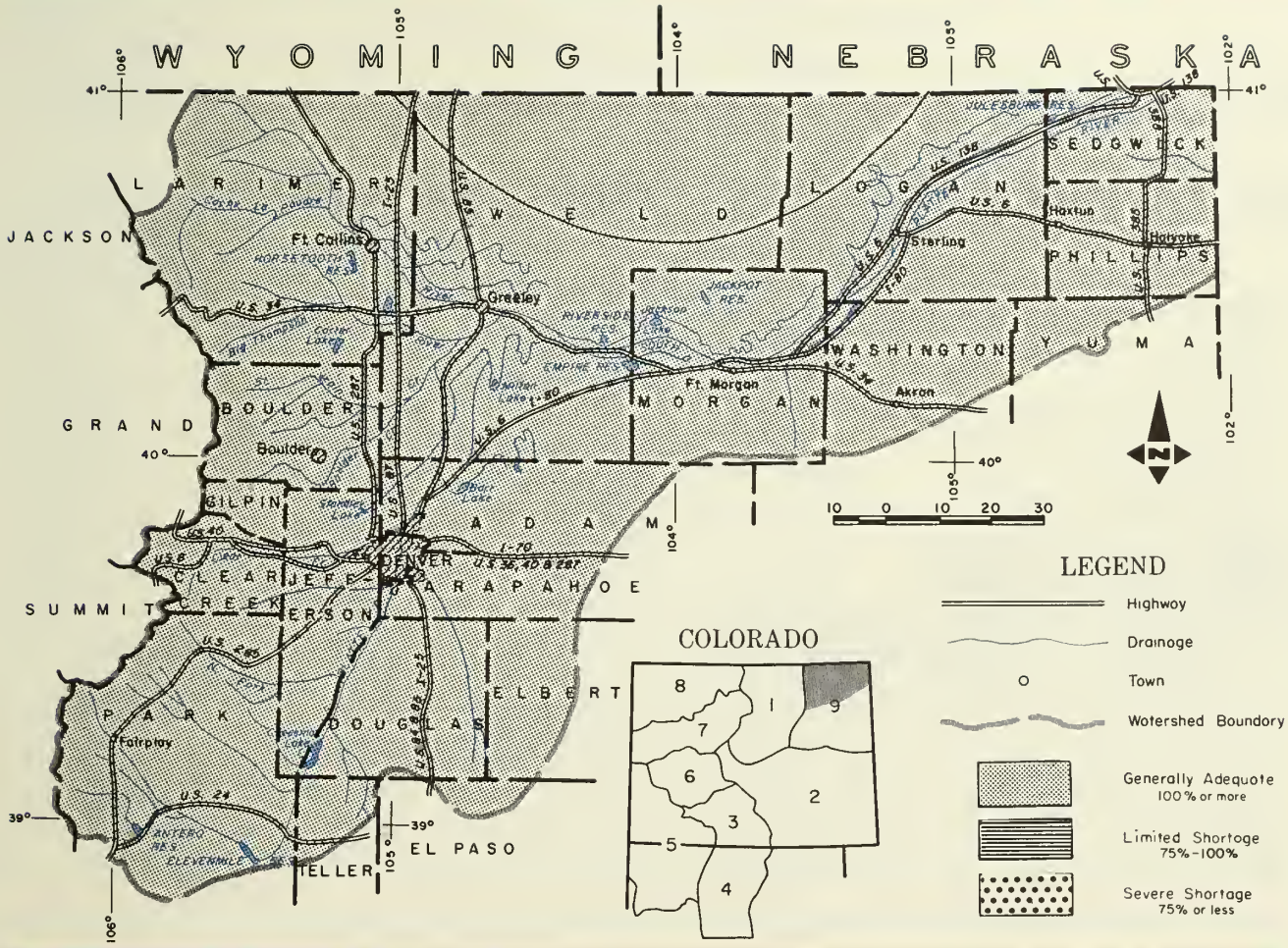

YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE LOWERED SLIGHTLY THIS MONTH. THE SNOWPACK RANGES FROM A LOW OF 104% ON THE SOUTH PLATTE TO 128% ON CLEAR CREEK. SUMMER FLOWS SHOULD STILL BE ABOVE NORMAL. RESERVOIR STORAGE IS 79% OF THE 15-YEAR NORMAL, BUT WILL PROVIDE SOME SUPPLEMENTAL SUPPLIES. VALLEY SOIL MOISTURE FROM FORT MORGAN EAST IS REPORTED AS POOR TO FAIR. HEAVY SNOWFALL DURING APRIL WOULD IMPROVE THE OUTLOOK.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROONEY M. ALT—AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	120	112	107
Boulder Creek at Orodell	55	112	49
Cache La Poudre River at Canyon Mouth (2)	290	117	247
Clear Creek at Golden (3)	150	118	127
Saint Vrain Creek at Lyons	85	113	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through Berthoud Pass Ditch.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Exc.	Avg.
South Platte from Fort Morgan to Sterling	Exc.	Avg.
South Platte below Sterling	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average*
Big Thompson	5	378	122
Boulder	3	234	112
Cache La Poudre	7	281	120
Clear Creek	5	212	128
Saint Vrain	3	412	121
South Platte	3	226	104

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average*
Carter	109	89	94	95
Cheesman	79	27	33	59
Eleven Mile	98	83	90	88
Empire	38	34	34	33
Horsetooth	144	50	90	111
Jackson	35	34	33	34
Julesburg	28	23	21	22
Point of Rocks	70	67	67	66
Prewitt	33	12	28	23
Riverside	58	46	60	58

* 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of APRIL 1, 1978

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	3/29	60	21.2	7.2	16.8
McIntyre	3/28	36	12.6	5.6	10.8
Roach	3/28	64	21.5	10.5	18.2
North Platte River					
Cameron Pass	3/30	78	32.0	17.6	28.7
Columbine Lodge	3/30	78	34.9	15.0	24.0
Northgate	3/30	23	6.9	3.5	6.5
Park View	3/29	30	10.0	5.9	9.2
Willow Cr. Pass (B)	3/29	44	14.8	7.2	12.7
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	3/30	23	7.2	4.3	6.8
Boulder Falls	3/22	46	15.1	6.7	13.4
University Camp	3/22	62	22.0	7.9	19.3
Big Thompson River					
Deer Ridge	3/30	19	4.7	0.0	4.8
Hidden Valley	3/30	35	10.2	2.5	10.5
Lake Irene (B)	3/26	83	29.6	9.8	20.9
Long's Peak	3/30	39	13.4	3.1	10.9
Two Mile	3/30	53	17.8	4.6	15.1
Cache La Poudre					
Bennett Creek	3/30	20	6.5	1.0	---
Big South	3/31	5	1.6	0.0	2.1
Cameron Pass	3/30	78	32.0	17.6	28.7
Chambers Lake	3/29	33	13.1	2.1	9.6
Deadman Hill	3/29	60	21.2	7.2	16.8
Hourglass Lake	3/30	26	8.8	2.4	6.7
Joe Wright	3/30	75	29.2	16.8	---
Lost Lake	3/31	40	14.8	3.8	11.8
Red Feather	3/29	21	7.3	2.1	6.9
Clear Creek					
Baltimore (B)	3/30	23	7.2	4.3	6.8
Berthoud Falls	3/30	44	15.6	7.2	13.6
Empire	3/30	27	8.3	4.6	7.8
Grizzly Peak (B)	3/28	70	27.5	10.9	18.9
Loveland Lift	Discontinued		---	15.6	21.1
Loveland Pass	3/28	58	22.1	11.0	15.7
St. Vrain River					
Copeland Lake	3/31	14	5.0	0.6	4.4
Ward	3/29	24	7.0	2.8	6.5
Wild Basin	3/31	43	14.8	3.1	11.2
South Platte River					
Como	3/31	21	6.2	1.8	---
Geneva Park	3/28	12	3.1	0.3	3.8
Horseshoe Mt.	3/31	35	9.5	4.3	---
Hoosier Pass	3/30	46	13.3	6.8	12.9
Jefferson Creek	3/31	34	10.5	4.8	9.2
Mosquito	3/30	36	10.9	1.1	---
Trout Creek Pass	3/29	6	1.4	0.0	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	3/30	17	4.1	6.3	6.5
Cooper Hill (B)	---	--	---	6.5	11.3
East Fork	3/30	38	13.0	5.7	9.8
Four Mile Park	3/30	21	5.6	0.6	5.1
Fremont Pass	3/30	64	23.4	10.4	16.2
Garfield	3/31	37	13.6	5.8	13.0
Hermit Lake	3/30	22	7.5	3.4	---
Monarch Pass	3/31	50	19.3	7.5	17.1
Tennessee Pass	3/30	45	13.2	5.2	10.6
Twin Lakes Tunnel	3/30	36	11.4	3.5	10.7
Westcliffe	3/30	15	5.0	4.5	6.3
Cucharas River					
Apishapa	3/30	21	8.0	6.5	---
Cucharas Creek	3/30	26	8.3	7.0	---
La Veta Pass (B)	3/30	23	7.7	6.8	7.4
Purgatoire River					
Bourbon	3/30	28	6.8	5.2	7.0
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	3/30	12	3.5	0.0	5.3
Conejos River					
Cumbres	3/28	72	29.7	6.6	18.0
La Manga	3/28	56	18.7	6.5	---
Platoro	3/30	40	13.5	3.6	16.3
River Springs	3/31	3	0.7	0.4	4.6
Culebra River					
Brown Cabin	3/30	22	8.1	2.6	---
Cottonwood (B)	3/30	21	7.7	1.4	---
Culebra	3/29	48	15.3	5.1	8.4
La Veta Pass (B)	3/30	23	7.7	6.7	7.4
Trinchera (B)	NS	--	---	5.0	---
Rio Grande					
Cochetopa Pass	3/28	18	5.4	2.2	5.9
Grayback	3/30	37	11.1	3.6	---
Hiway	3/30	68	23.8	7.4	23.8
Lake Humphrey	3/28	15	4.3	1.1	6.1
Love Lake	3/30	27	9.2	2.1	---
Pass Creek	3/30	26	9.7	2.4	9.8
Pool Table	3/30	14	3.0	2.1	6.1
Porcupine	3/30	32	7.9	2.0	10.5
Santa Maria	3/30	14	3.4	0.0	3.6
Upper Rio Grande	3/30	24	7.1	0.7	7.5
Wolf Creek Pass	3/30	69	26.6	8.4	25.5
Wolf Cr. Summit (B)	3/30	80	27.5	9.0	28.3
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela	3/31	5	2.0	2.0	2.0
Rio Chama					
Bateman	3/30	43	17.4	4.9	11.7
Chama Divide	3/28	10	3.9	0.0	1.7
Chamita	3/28	29	11.6	0.0	7.2
Rio Grande					
Alamitos	3/29	16	5.0	5.1	---
Big Tesuque	3/30	18	6.8	0.1	4.6
Cordova	3/28	38	10.1	6.3	10.1
Elk Cabin	3/28	6	2.1	1.5	2.5
Gallegos Peak	3/29	32	9.8	---	---
Hopewell	3/30	53	18.2	6.7	---
La Cueva	3/30	18	7.3	3.6	---
North Costilla	3/30	23	7.0	3.8	---
Palo	3/28	22	6.4	3.8	---
Payrole	NS	--	---	0.0	6.8
Quemazon	3/30	26	7.6	5.0	9.0
Rio En Medio	3/30	32	11.8	4.4	7.4
Sandoval	3/30	12	4.3	3.8	4.2
Senorita Divide	3/29	25	9.8	1.3	---
Taos Canyon	3/28	15	5.1	3.0	3.9
Tres Ritos	3/29	11	4.4	2.4	4.8
Rio Hondo					
Taos Powderhorn	4/03	74	26.4	15.5	---
Red River					
Hematite Park (B)	3/30	14	5.0	2.2	3.5
Red River	3/30	20	7.2	3.2	---

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of APRIL 1, 1978

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES) LAST YEAR	WATER CONTENT (INCHES) AVG 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	3/31	38	15.3	1.6	10.2
Lemon	3/31	27	10.9	0.0	---
Mineral Creek	3/30	60	21.6	5.6	15.4
Molas Lake	3/30	48	19.1	1.8	12.6
Purgatory	4/03	74	23.9	5.2	---
Red Mt. Pass (B)	3/30	102	39.2	13.7	31.5
Silverton Sub-Sta.	3/30	26	10.6	0.0	5.2
Spud Mountain	3/30	77	28.8	5.0	23.1
Dolores River					
Lizard Head	3/31	64	23.2	4.1	17.2
Lone Cone	3/30	56	21.2	6.6	---
Ophir Loop	3/29	62	21.8	7.7	---
Rico	3/31	27	10.4	0.0	6.1
Telluride	3/29	35	13.2	1.4	6.5
Trout Lake	3/29	60	22.3	5.1	13.7
San Juan River					
Chama Divide (B)	3/28	10	3.9	0.0	1.7
Chamita (B)	3/28	29	11.6	0.0	7.2
Upper San Juan	3/30	86	35.6	9.9	28.6
Wolf Cr. Pass (B)	3/30	69	26.6	8.4	25.5
Wolf Cr. Summit	3/30	80	27.5	9.0	28.3
GUNNISON BASIN					
Gunnison River					
Alexander Lake	3/30	91	36.4	8.5	22.8
Blue Mesa	3/30	31	8.1	3.9	7.2
Butte	3/30	58	19.9	5.5	---
Cochetopa Pass (B)	3/28	18	5.4	2.2	5.9
Crested Butte	3/30	54	21.9	6.3	13.0
Keystone	3/30	75	30.0	8.1	20.0
Lake City	3/29	31	7.8	2.1	8.0
Mesa Lakes (B)	3/31	68	26.0	7.0	17.6
McClure Pass	3/30	46	18.2	7.9	15.1
Park Cone	3/28	42	12.7	2.2	10.6
Park Reservoir	3/30	97	37.5	8.5	23.8
Porphyry Creek	3/31	58	22.1	8.0	16.9
Tomichi	3/31	43	16.2	5.3	12.6
Surface Creek					
Alexander Lake	3/30	91	36.4	8.5	22.8
Mesa Lakes	3/31	68	26.0	7.0	17.6
Park Reservoir	3/30	97	37.5	8.5	23.8
Uncompahgre River					
Ironton Park	3/30	48	20.4	8.2	10.2
Red Mountain Pass	3/30	102	39.2	13.7	31.5
Telluride (B)	3/29	35	13.2	1.4	6.5
COLORADO BASIN					
Blue River					
Blue River	3/30	31	8.1	5.1	8.5
Fremont Pass	3/30	64	23.4	10.4	16.2
Officers Gulch	3/28	28	8.0	1.4	7.4
Grizzly Peak	3/28	70	27.5	10.9	18.9
Hoosier Pass (B)	3/30	46	13.3	6.8	12.9
Shrine Pass	3/28	66	23.9	10.7	18.1
Snake River	3/28	37	12.2	3.6	7.9
Summit Ranch	3/28	33	10.5	4.4	7.1

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES) LAST YEAR	WATER CONTENT (INCHES) AVG 58-72
Colorado River					
Arrow	3/29	45	15.9	7.8	13.2
Berthoud Pass	3/29	55	20.4	9.9	15.9
Berthoud Summit	3/30	66	24.2	13.8	19.7
Cooper Hill	NS	--	---	6.5	11.3
Fiddler Gulch	Discontinued		---	6.5	14.5
Glenmar Ranch	3/29	29	9.9	6.5	8.5
Gore Pass	3/28	41	14.6	4.9	10.2
Grand Lake	3/26	42	14.5	4.5	8.2
Lake Irene	3/26	83	29.6	9.8	20.9
Lapland	3/30	33	10.7	4.1	10.4
Lulu	3/27	80	31.9	10.4	18.7
Lynx Pass	3/28	48	16.8	6.0	12.8
McKenzie Gulch	3/28	22	7.5	2.4	5.0
Middle Fork	3/29	34	12.3	6.3	9.9
Milner	3/26	60	20.0	6.4	13.6
North Inlet	3/27	41	13.6	3.9	8.7
Pando	3/28	44	13.1	4.2	10.3
Phantom Valley	3/26	48	17.4	4.5	10.8
Ranch Creek	3/29	38	12.9	4.8	9.9
Tennessee Pass (B)	3/30	45	13.2	5.2	10.6
Vail	3/27	86	32.8	---	---
Vasquez	3/30	47	16.6	8.2	12.9
Roaring Fork					
Aspen	3/28	71	26.7	12.0	17.1
Independence Pass	3/30	56	20.7	9.1	17.5
Ivanhoe	3/29	66	23.0	9.6	18.1
Kiln	3/29	47	14.3	6.2	---
Lift	3/28	59	20.4	10.2	17.8
McClure Pass	3/30	46	18.2	7.9	15.1
Nast	3/30	24	7.4	2.1	5.6
North Lost Trail	3/30	44	16.7	6.2	14.6
Williams Fork River					
Glenmar Ranch	3/29	29	9.9	6.5	8.5
Jones Pass	3/29	58	22.0	10.1	15.5
Middle Fork	3/29	34	12.3	6.3	9.9
Willow Creek					
Granby	3/29	30	9.8	3.4	7.5
Willow Cr. Pass	3/29	44	14.8	7.2	12.7
Plateau Creek					
Mesa Lakes	3/31	68	26.0	7.0	17.6
Park Reservoir	3/30	97	37.5	8.5	23.8
Trickle Divide	3/30	98	38.0	9.2	25.9
YAMPA BASIN					
Elk River					
Elk River	3/29	66	27.1	9.4	17.8
Hahn's Peak	3/29	53	22.3	7.6	13.7
White River					
Burro Mountain	3/27	67	25.0	9.5	17.2
Rio Blanco	3/28	55	22.4	6.9	15.7
Yampa River					
Bear River	3/27	45	14.4	4.9	11.2
Columbine (B)	3/30	78	34.9	15.0	24.0
Crosho	3/27	56	20.2	8.2	---
Dry Lake	3/30	76	31.3	11.1	20.0
Lynx Pass (B)	3/28	48	16.8	6.0	12.8
Rabbit Ears	3/30	92	37.7	13.9	25.9
Tower	3/28	175	75.7	25.4	---
Yampa View	3/30	49	21.2	9.7	14.6

NOTE: NS - No Survey
(B) - On Adjacent Drainage

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

- Colorado State Engineer
- New Mexico State Engineer
- Nebraska State Engineer
- Colorado State University Experiment Station
- Rocky Mountain Forest and Range Experiment Station
- New Mexico Dept. of Game and Fish

FEDERAL

- Department of Agriculture
  - Forest Service
  - Soil Conservation Service
- Department of Interior
  - Bureau of Reclamation
  - Geological Survey
  - National Park Service
  - Indian Service
- Department of Commerce
  - NOAA, National Weather Service
- Defense Department
  - Army Engineer Corps
- Atomic Energy Comission

INVESTOR OWNED UTILITIES

- Colorado Public Service Company
- Public Service Company of New Mexico

MUNICIPALITIES

- City of Denver
- City of Boulder
- City of Greeley
- City of Fort Collins

WATER USERS ORGANIZATIONS

- Arkansas Valley Ditch Association
- Colorado River Water Conservation District

IRRIGATION PROJECTS

- Farmers Reservoir and Irrigation Company
- San Luis Valley Irrigation District
- Santa Maria Reservoir Company
- Costilla Land Company
- Uncompahgre Valley Water Users' Association
- Twin Lakes Reservoir and Canal Company
- Trinchera Irrigation Co.

CORPORATIONS

- Aspen Skiing Corp.
- Colorado Fuel and Iron Corp.
- Climax Molybdenum Corp.
- Lake Eldora Corp.
- Vail Associates, Incorporated
- Vermejo Park Corp. (NM)
- Taylor Lumber and Land Company

PRIVATE CITIZENS

- Otto Goemmer, Colorado
- Moreno Ranch, New Mexico

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
MAY 1, 1978

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SOME OF THE DATA IN THIS REPORT HAVE BEEN RECEIVED THROUGH THE SOIL CONSERVATION SERVICE'S NEW SNOTEL SYSTEM WHICH TRANSMITS INFORMATION VIA THE SPACE AGED METEOR BURST METHOD FROM DATA SITES TO MASTER STATIONS LIKE THESE.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.

USDA-SCS-PORTLAND, OR 1977

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R. M. DAVIS

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

ROBERT G. HALSTEAD

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

ALBERT W. HAMELSTROM

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN

DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
BERNARD A. SHAFER, Assistant Snow Survey Supervisor
JUDY R. TEILBORG, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

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Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

MAY 1, 1978

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
MAY 1, 1978

SNOWPACK REMAINS HIGHLY VARIABLE ACROSS COLORADO AND INTO NEW MEXICO. AS A RESULT, STREAMFLOWS ARE EXPECTED TO ALSO BE HIGHLY VARIABLE. THE NORTHERN, CENTRAL, AND SOUTHWESTERN AREAS OF COLORADO EXHIBIT WELL ABOVE NORMAL SNOWPACKS. THE FRONT RANGE RECEIVED BELOW NORMAL AMOUNTS OF SNOW DURING APRIL WHICH RESULTED IN A DROP IN WATER SUPPLY FORECASTS FOR THAT AREA. ALL STREAMS IN COLORADO AND NEW MEXICO SHOULD PRODUCE NORMAL TO WELL ABOVE NORMAL WITH THE EXCEPTION OF THE RIO GRANDE AND TRIBUTARIES TO THE ARKANSAS RIVER WHERE FLOWS WILL BE 15 TO 20% BELOW THE NORM.

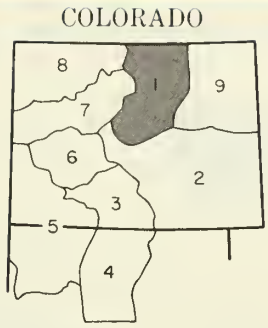
COLORADO -- APRIL BROUGHT INCREASES IN SNOW AT THE HIGHER ELEVATIONS BUT SNOWPACKS BEGAN MELTING AT LOW AND MEDIUM ELEVATIONS. THE YAMPA AND WHITE RIVER DRAINAGES REMAIN THE HIGHEST IN THE STATE AND ARE EXPECTED TO FLOW 145% OF NORMAL. HEADWATERS OF THE COLORADO SHOULD PRODUCE WATER SUPPLIES 10 TO 25% GREATER THAN AVERAGE. THE FRONT RANGE RECEIVED DEFICIENT AMOUNTS OF SNOW DURING MARCH AND APRIL. FORECASTS OF STREAMFLOW IN THIS LOCALITY ARE NOW NEAR AVERAGE. THE RIO GRANDE BASIN AND TRIBUTARIES TO THE ARKANSAS WILL LIKELY FLOW 15 TO 20% BELOW NORMAL.

NEW MEXICO -- SNOWPACKS HAVE GENERALLY MELTED AT ALL BUT THE HIGHEST ELEVATIONS. FORECASTS OF STREAMFLOW HAVE BEEN CHANGED ONLY SLIGHTLY FROM LAST MONTH. THE RIO GRANDE AND RIO CHAMA ARE EXPECTED TO FLOW BETWEEN 95 AND 105% OF NORMAL WHICH IS A SLIGHT REVISION DOWNWARD. MOST TRIBUTARY STREAMS SHOULD STILL PRODUCE NORMAL TO SLIGHTLY ABOVE WATER SUPPLIES. RAINS NEAR THE FIRST OF MAY IMPROVED SOIL MOISTURE. RESERVOIR STORAGE STATEWIDE REMAINS WELL BELOW NORMAL.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

MAY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

THE SNOWFALL DURING APRIL WAS SLIGHTLY BELOW NORMAL. THE PACK IS NOW JUST NORMAL ON ALL DRAINAGES. SOME DECREASE IN FLOW CAN BE EXPECTED BECAUSE OF THE SEVERE DROUGHT LAST YEAR. THE AMOUNT OF FLOW NECESSARY TO FILL THE SOIL MOISTURE VOIDS COULD BE CONSIDERABLE. CARRYOVER STORAGE IS 75% OF NORMAL. THE EARLY MAY STORM HAS NOT BEEN CONSIDERED IN THE SNOWPACK NOR VALLEY SOIL MOISTURE. THIS STORM MATERIALLY IMPROVED VALLEY SOIL MOISTURE.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROGER A. HANSEN—AREA CONSERVATIONIST
LA JUNTA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

RODNEY M. ALT—AREA CONSERVATIONIST
GREELEY, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Big Thompson River at Drake (1)	105	98	107
Boulder Creek at Orodell	50	102	49
Cache La Poudre River at Canyon Mouth (2)	235	95	247
Clear Creek at Golden (3)	125	98	127
St. Vrain Creek at Lyons	75	100	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Avg.	Fair
Coal Creek	Avg.	Fair
North Fork of South Platte	Avg.	Fair
North Fork of Cache La Poudre	Avg.	Fair
Ralston Creek	Avg.	Fair
Rock Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Big Thompson	5	308	95
Boulder	3	249	105
Cache La Poudre	7	229	99
Clear Creek	5	185	107
Saint Vrain	2	293	51
South Platte	3	202	99

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Antero	16	15	16	14
Barr Lake	32	22	28	26
Black Hollow	8	3	4	4
Boyd Lake	44	16	34	38
Cache La Poudre	10	8	0	9
Carter Lake	109	96	106	99
Chambers Lake	9	4	1	4
Cheesman	79	30	34	60
Cobb Lake	34	0	5	15
Eleven Mile	98	83	90	89
Fossil Creek	12	7	10	8
Gross	43	15	23	23
Halligan	6	1	5	6
Horsetooth	144	59	99	121
Lake Loveland	14	9	9	10
Lone Tree	9	7	5	8
Mariano	5	5	5	5
Marshall	10	3	5	6
Marston	17	16	17	16
Milton	24	13	20	15
Standley	42	23	31	20
Terry	8	6	6	6
Union	13	10	13	10
Windsor	19	9	11	13

* 1958-1972 period.

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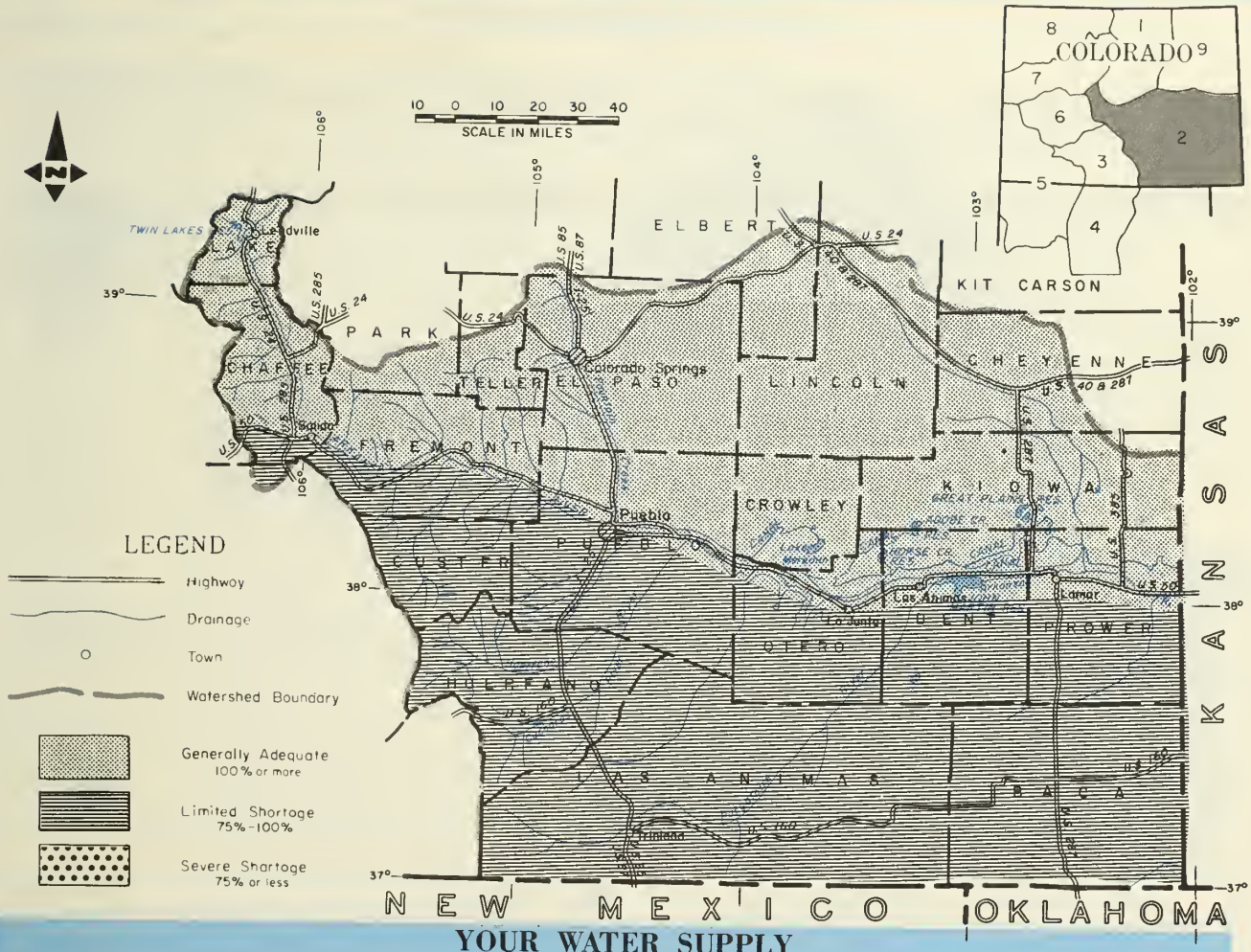
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

MAY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SOME WATER SHORTAGES CAN BE EXPECTED THIS SUMMER ON THE ARKANSAS AND ITS SOUTHERN TRIBUTARIES. THE SNOWPACK AT THE HIGHER ELEVATIONS ON THE ARKANSAS IS ABOVE NORMAL BUT RAPIDLY FALLS OFF AT THE LOWER PORTIONS. CARRYOVER STORAGE IS POOR. VALLEY SOILS WERE REPORTED AS DRY, BUT SHOULD BE IMPROVED AFTER THE FIRST OF MAY STORMS.

This report prepared by

JACK N. WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

ROGER A HANSEN—AREA CONSERVATIONIST
LA JUNTA COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

D W GILLASPIE AREA CONSERVATIONIST
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Arkansas River near Pueblo (1)	310	106	290
Arkansas River at Salida (2)	330	105	313
Cucharas River near La Veta	8	80	10
Huerfano River near Redwing	12	80	15
Purgatoire River at Trinidad (3)	32	84	38

(1) Plus change in storage in Pueblo Reservoir. (2) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine ditches. (3) Change in storage in Trinidad Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa River	Avg.	Fair
Fountain Creek	Avg.	Fair
Grape Creek	Avg.	Fair
Hardscrabble Creek	Avg.	Fair
Monument Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Arkansas	10	291	114
Cucharas	-	--	--
Purgatoire	1	250	20

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average *
Adobe	62	0	0	16
Clear Creek	11	2	-	8
Cucharas	40	0	0	3
Great Plains	150	0	0	57
Horse Creek	27	0	9	7
John Martin	621	0	9	73
Meredith	42	0	0	13
Model	15	0	0	3
Turquoise	121	43	39	--
Twin Lakes	58	14	8	22
Pueblo	327	4	54	--

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

MAY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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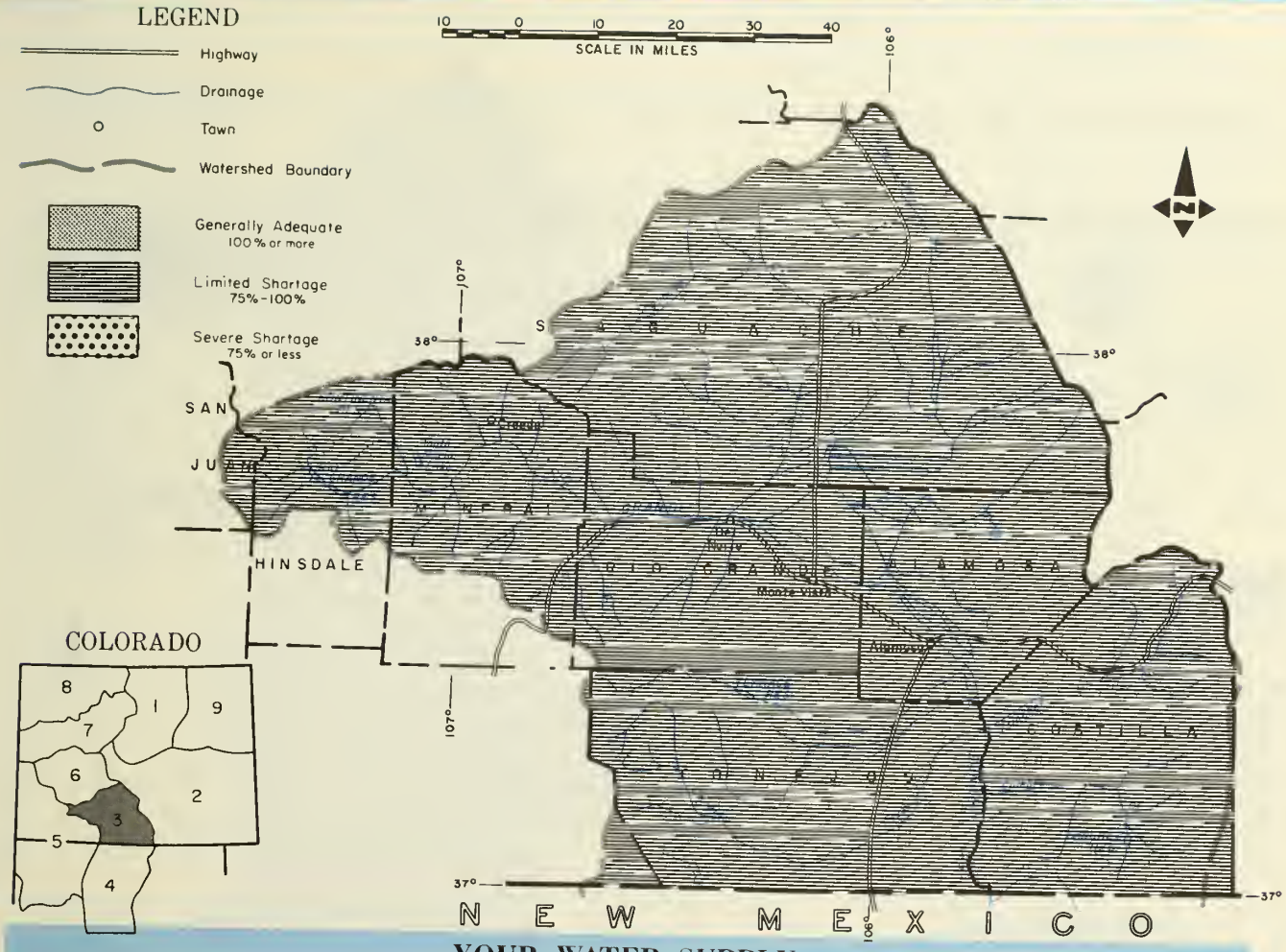

YOUR WATER SUPPLY

THE SNOWPACK ON THE RIO GRANDE STILL REMAINS NEAR NORMAL. SUMMER FLOWS SHOULD BE ONLY SLIGHTLY BELOW NORMAL UNLESS THE DROUGHT OF LAST YEAR SUBSTANTIALLY DEPLETED SURFACE AND SUB-SOIL MOISTURE. CARRYOVER STORAGE IS ONLY ABOUT 60% OF NORMAL. EARLY MAY STORMS MAY HAVE IMPROVED SOIL MOISTURE CONDITIONS OVER THE ENTIRE VALLEY.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

O. W. GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	* Average
Alamosa Creek above Terrace Reservoir	50	81	62
Conejos River near Mogote (1)	175	95	184
Culebra Creek at San Luis (2)	18	110	17
Rio Grande at 30 Mile Bridge (3)	100	83	121
Rio Grande near Del Norte (3)	380	81	468
South Fork of Rio Grande at South Fork	100	87	115

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Avg.	Fair
Sangre de Cristo Cr.	Avg.	Fair
Trinchera Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Alamosa	-	---	---
Conejos	3	2940	120
Culebra	2	200	110
Rio Grande	10	389	91

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average *
Continental	27	5	3	7
Platoro	75	13	13	10
Rio Grande	46	8	5	20
Sanchez	103	6	5	15
Santa Maria	45	4	8	8
Terrace	18	1	4	7

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

MAY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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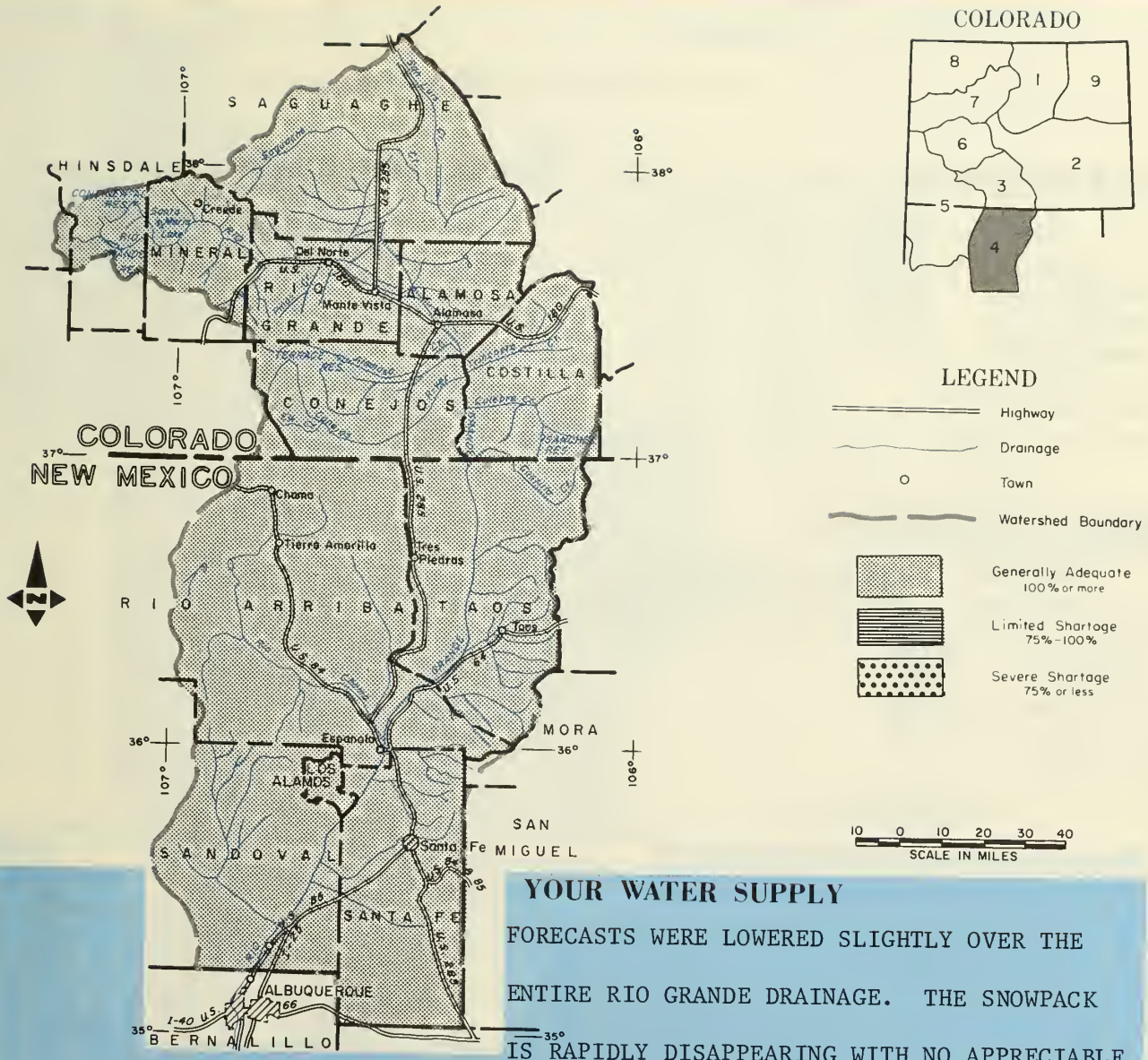

YOUR WATER SUPPLY

FORECASTS WERE LOWERED SLIGHTLY OVER THE ENTIRE RIO GRANDE DRAINAGE. THE SNOWPACK IS RAPIDLY DISAPPEARING WITH NO APPRECIABLE INCREASE IN STREAMFLOW. SOME OF THE FLOW WILL BE NEEDED TO REPLACE THE SOIL MOISTURE FROM LAST YEAR'S DROUGHT. SOME SHORTAGES CAN BE EXPECTED. CARRYOVER STORAGE IS 58% OF NORMAL. THE EARLY MAY STORM IN RIO GRANDE DRAINAGE MAY HELP.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

A. W. HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

JAMES E. TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) March—July

FORECAST POINT	FORE-CAST	% of Average	Average *
Costilla Creek at Costilla (1)	23	121	19
Jemez River near Jemez	36	124	29
Pecos River at Pecos	40	98	41
Red River at Mouth near Questa	30	103	29
Rio Chama at El Vado	200	105	190
Rio Grande at Otowi (2)	500	95	526
Rio Grande at San Marcial (2)	350	98	355
Rio Hondo near Valdez	16	114	14
Santa Cruz River at Cundiyo	14	108	13

(1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Avg.	Fair
Mora River	Avg.	Fair
Nambe Creek	Avg.	Fair
Rio Ojo Caliante	Avg.	Fair
Rio Pueblo de Taos	Avg.	Fair
Santa Fe Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average *
Pecos	-	--	--
Red River	-	--	--
Rio Chama	-	--	--
Rio Grande, NM	-	--	--
Rio Hondo	-	--	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average *
Avalon	5	2	1	--
Caballo	344	40	48	83
Conchas	273	98	84	175
El Vado	195	80	127	28
Elephant Butte	2195	198	348	380
McMillan	34	16	9	--
Sumner	111	3	5	62

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
MAY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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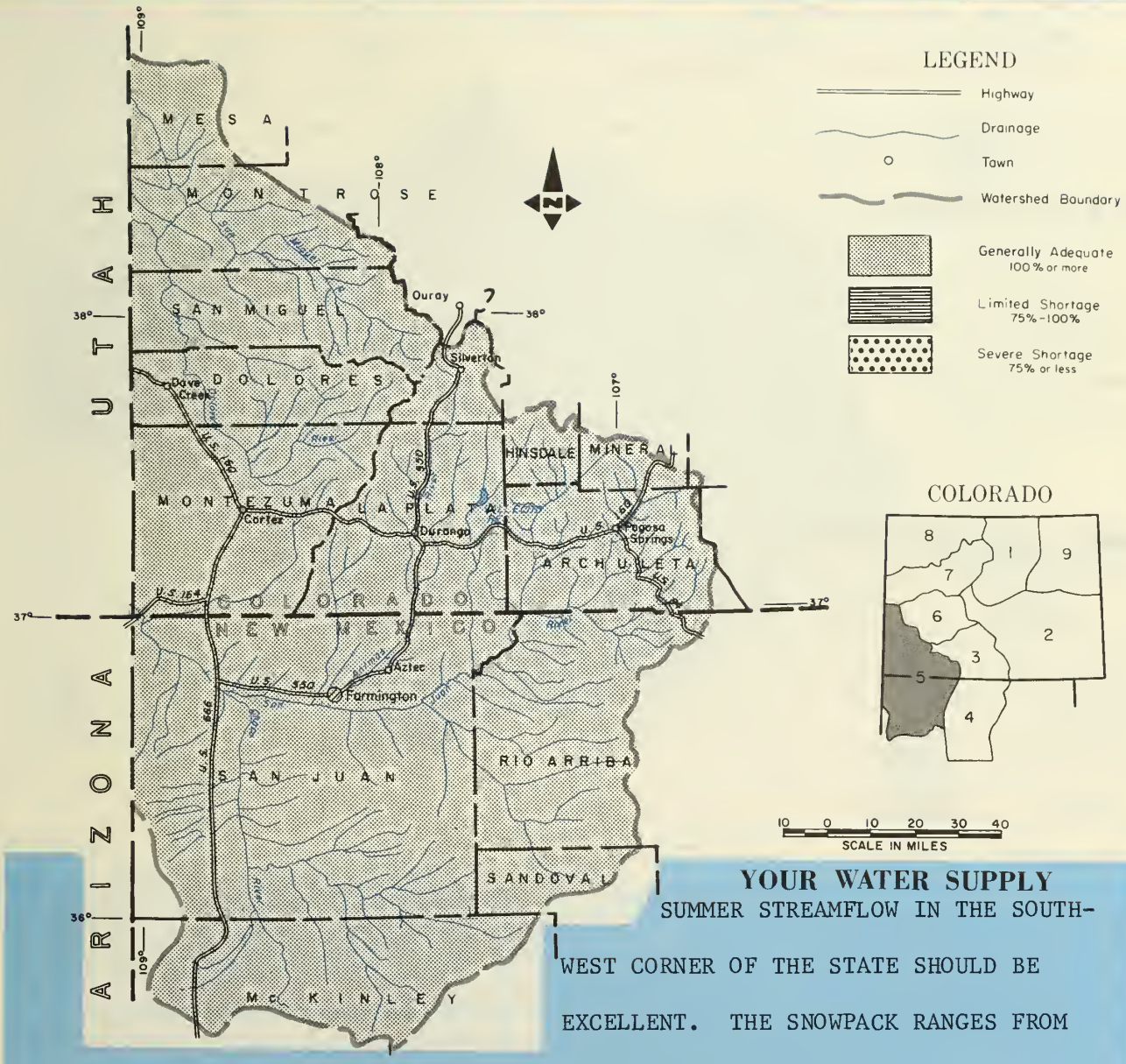

YOUR WATER SUPPLY

SUMMER STREAMFLOW IN THE SOUTHWEST CORNER OF THE STATE SHOULD BE EXCELLENT. THE SNOWPACK RANGES FROM 106% TO 138% OF THE 15-YEAR AVERAGE. THE DOLORES AND MANCOS HAVE ESPECIALLY HIGH FORECASTS. CARRYOVER STORAGE IS GOOD. THE FIRST OF MAY STORM SHOULD IMPROVE CONDITIONS, ESPECIALLY THE VALLEY SOIL MOISTURE.

This report prepared by

JACK N WASHICHEK—BERNARD A SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

A W HAMELSTROM—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

D W GILLASPIE—AREA CONSERVATIONIST
ALAMOSA, COLORADO

JAMES E TATUM—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Animas River at Durango	550	130	423
Dolores River at Dolores	300	129	232
La Plata River at Hesperus	30	125	24
Los Pinos River at Bayfield (1)	230	116	198
Mancos River near Towac (2)	18	129	14
Inflow to Navajo River (1 & 3)	650	109	597
Piedra Creek at Arboles	200	108	185
San Juan River at Carracas	350	100	354
San Miguel River at Placerville	170	131	130

(1) Observed flow plus change in storage in Vallecito Reservoir. (2) March-July. (3) April-July.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida River	Exc.	Avg.
Hermosa Creek	Exc.	Avg.
West Dolores River	Exc.	Avg.
Williams Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Animas	6	750	127
Dolores	4	---	138
San Juan	5	538	106

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Groundhog	22	11	4	12
Jackson Gulch	10	4	0	7
Lemon	40	7	22	25
Navajo	1696	1030	1090	944
Vallecito	126	39	50	68

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

MAY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

APRIL WAS ANOTHER GOOD MONTH FOR SNOW. BASIN SNOWCOVER IS NOW 129 TO 167% OF NORMAL WITH THE GRAND MESA AREA HAVING THE HEAVIEST ACCUMULATIONS. SNOWMELT RUNOFF SHOULD PROVIDE ABOVE NORMAL STREAMFLOW. RESERVOIR STORAGE REMAINS BELOW NORMAL BUT SHOULD IMPROVE CONSIDERABLY WITH THE SPRING RUNOFF. SOIL MOISTURE IS RATED AS FAIR TO GOOD IN IRRIGATED AREAS.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE – SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Gunnison River inflow to Blue Mesa Reservoir (1)	930	117	793
Gunnison River near Grand Junction (2)	1500	127	1184
North Fork of Gunnison (3)	350	133	263
Surface Creek near Cedaredge	21	131	16
Uncompahgre River at Colona	175	130	134

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ohio Creek	Exc.	Exc.
Slate River	Exc.	Exc.
Taylor River	Exc.	Exc.
Tomichi Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Gunnison	12	1059	152
Surface Creek	3	1717	167
Uncompahgre	3	399	129

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average *
Blue Mesa	830	276	360	308
Morrow Point	121	114	113	115
Taylor	106	28	58	62

* 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

MAY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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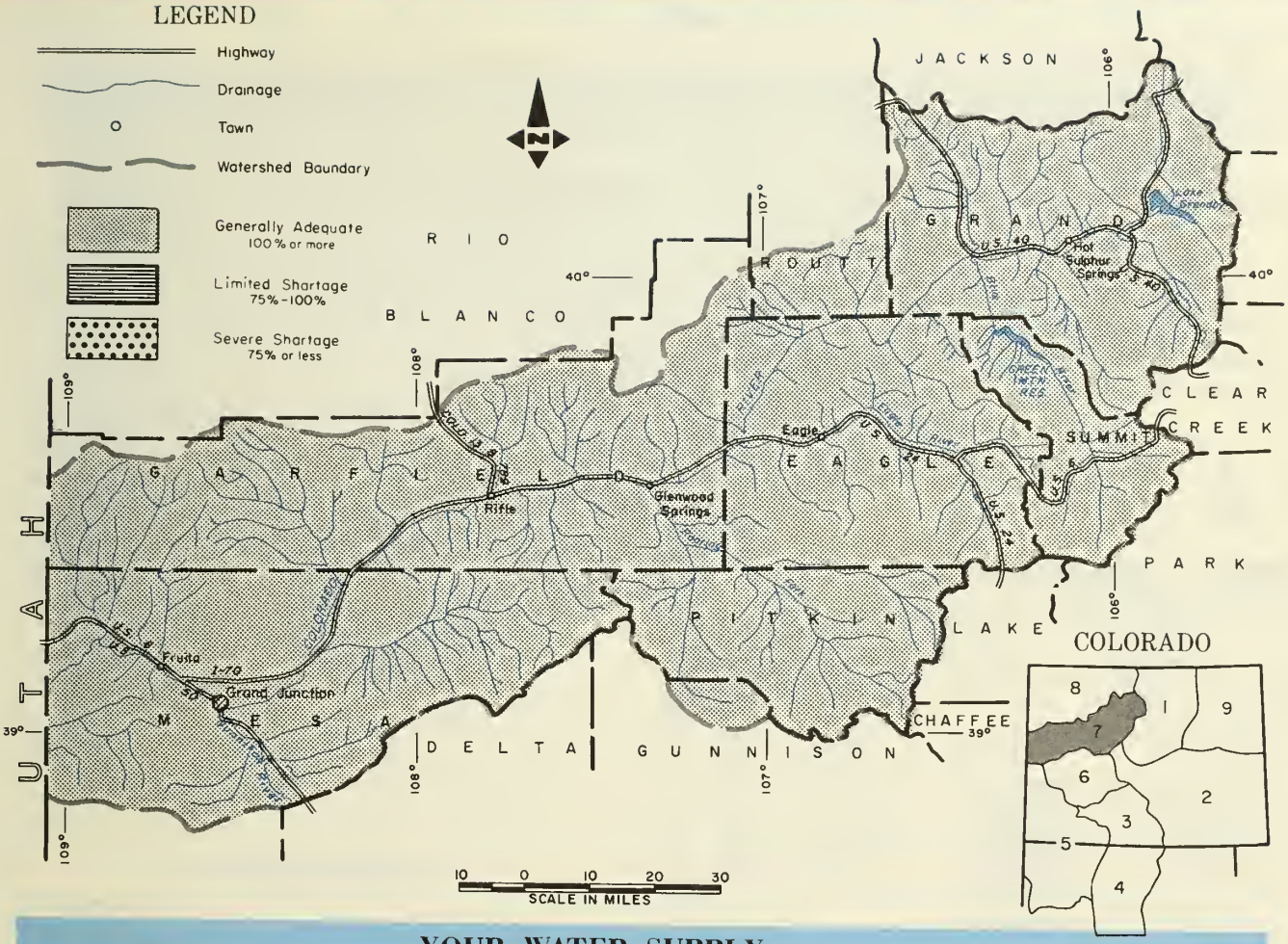

YOUR WATER SUPPLY

SNOWPACK REMAINS GOOD TO EXCELLENT IN ALL WATERSHEDS. STREAMFLOW FORECASTS HAVE REMAINED THE SAME OR DECREASED SLIGHTLY FROM LAST MONTH. ALL STREAMS SHOULD FLOW ABOVE AVERAGE AND WILL SIGNIFICANTLY IMPROVE RESERVOIR STORAGE WHICH IS CURRENTLY ONLY 46% OF THE 15-YEAR AVERAGE. SUB-SURFACE MOISTURE IN IRRIGATED AREAS IS REPORTED AS FAIR TO GOOD.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Blue River inflow to Dillon Reservoir	205	121	169
Blue River inflow to Green Mountain Reservoir (1)	360	121	297
Colorado River near Cameo (6)	2900	122	2370
Colorado River near Dotsero (3)	1800	126	1434
Colorado River inflow to Granby Reservoir (2)	290	127	228
Roaring Fork at Glenwood Springs (4)	800	112	713
Williams Fork near Parshall (5)	75	119	63
Willow Creek inflow to Willow Creek Reservoir	55	117	47

(1) Observed flaw plus diversions through Roberts Tunnel and change in starage in Dillan Reservoir. (2) Observed flaw corrected far change in starage in Lake Granby as furnished by U.S.B.R. and diversians by Adams Tunnel ond Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservairs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels alus change in starage in Ruedi Reservoir. (5) Observed flaw plus diversians thraugh August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Paar, Fair, Average, Excellent" With Respect ta Usual Supply

STREAM ar AREA	Flaw Period	
	Spring Seasan	Late Seasan
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number af Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Blue River	7	224	120
Colorado	20	311	128
Plateau	3	1051	161
Roaring Fork	7	412	125
Williams Fork	3	304	105
Willow	2	565	109

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Starage		
		This Year	Last Year	Average*
Dillon	254	109	199	229
Granby	466	21	150	209
Green Mountain	139	48	72	45
Homestake	43	0	9	11
Ruedi	101	59	70	55
Vega	32	4	9	15
Williams Fork	97	29	46	29
Willow Creek	9	7	6	6

* 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
MAY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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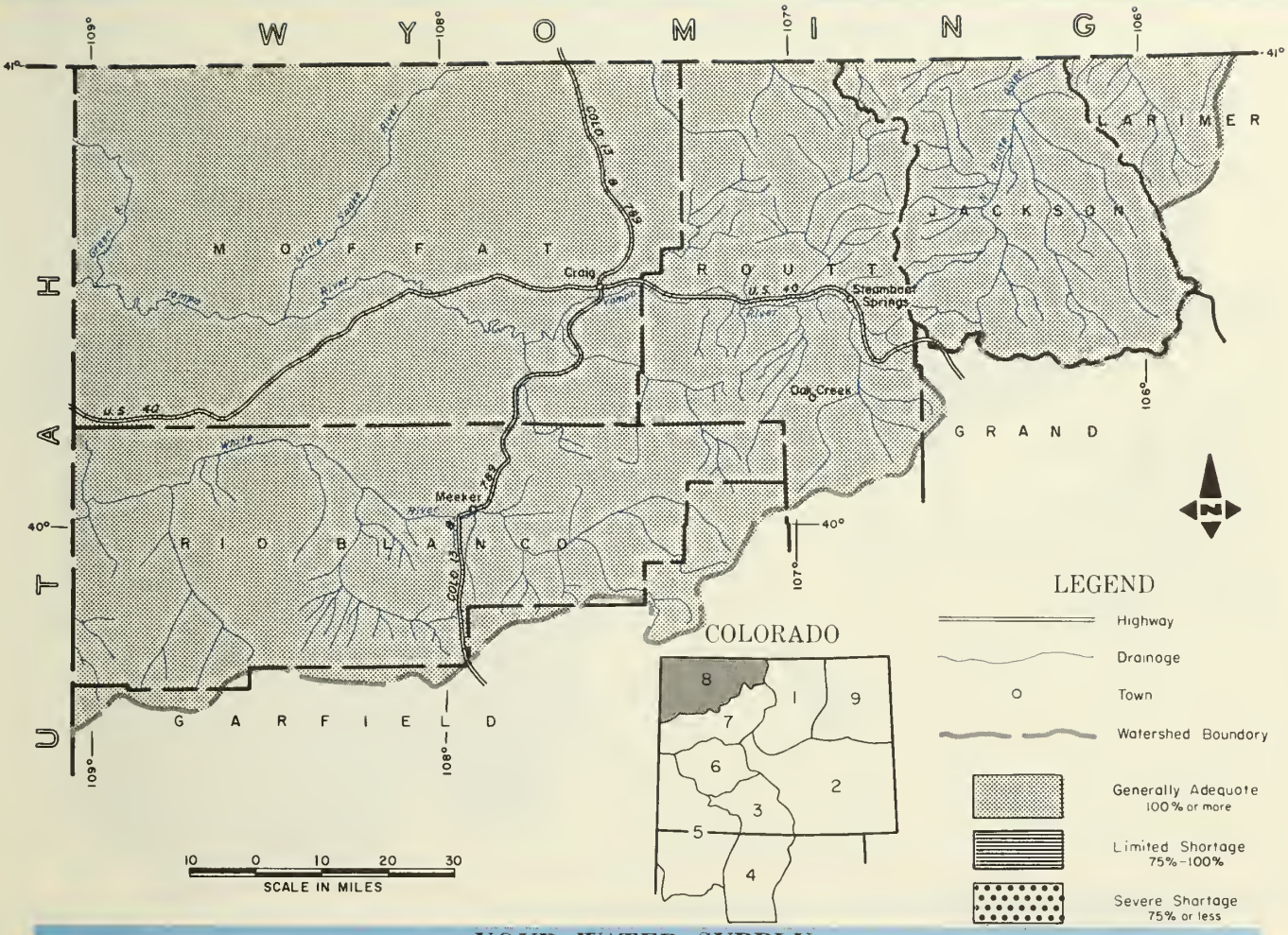

YOUR WATER SUPPLY

STORMS DURING APRIL CONTINUED TO BUILD THE SNOWPACK AT HIGHER ELEVATIONS WHILE SOME MELT OCCURRED AT LOWER ELEVATIONS. TOWER SNOW COURSE ON BUFFALO PASS WAS MEASURED AT 175 INCHES OF SNOW WITH 6.5 FEET OF WATER, ANOTHER RECORD. THE YAMPA AND WHITE RIVERS WILL FLOW MUCH ABOVE NORMAL. LOCALIZED CHANNEL OVERFLOWS CAN BE EXPECTED ON LOW LYING AREAS. THE NORTH PLATTE SHOULD PRODUCE ABOVE NORMAL FLOWS ALSO. SOIL MOISTURE IS REPORTED AS GOOD.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

DEAN F. FISHER—AREA CONSERVATIONIST
GRAND JUNCTION, COLORADO

U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average *
Elk River at Clark	280	141	198
Laramie River near Woods	140	110	127
Little Snake River at Lily	500	154	324
North Platte River at Northgate	290	121	240
White River near Meeker	420	142	295
Yampa River near Maybell	1300	144	905
Yampa River at Steamboat Springs	400	146	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Avg.	Fair
Hunt Creek	Avg.	Fair
Illinois River	Avg.	Fair
Michigan River	Avg.	Fair
Oak Creek	Exc.	Avg.
Trout Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *
Elk	2	1082	158
Laramie	3	189	102
North Platte	5	276	113
White	2	1103	156
Yampa	6	749	149

* 1958-1972 period.

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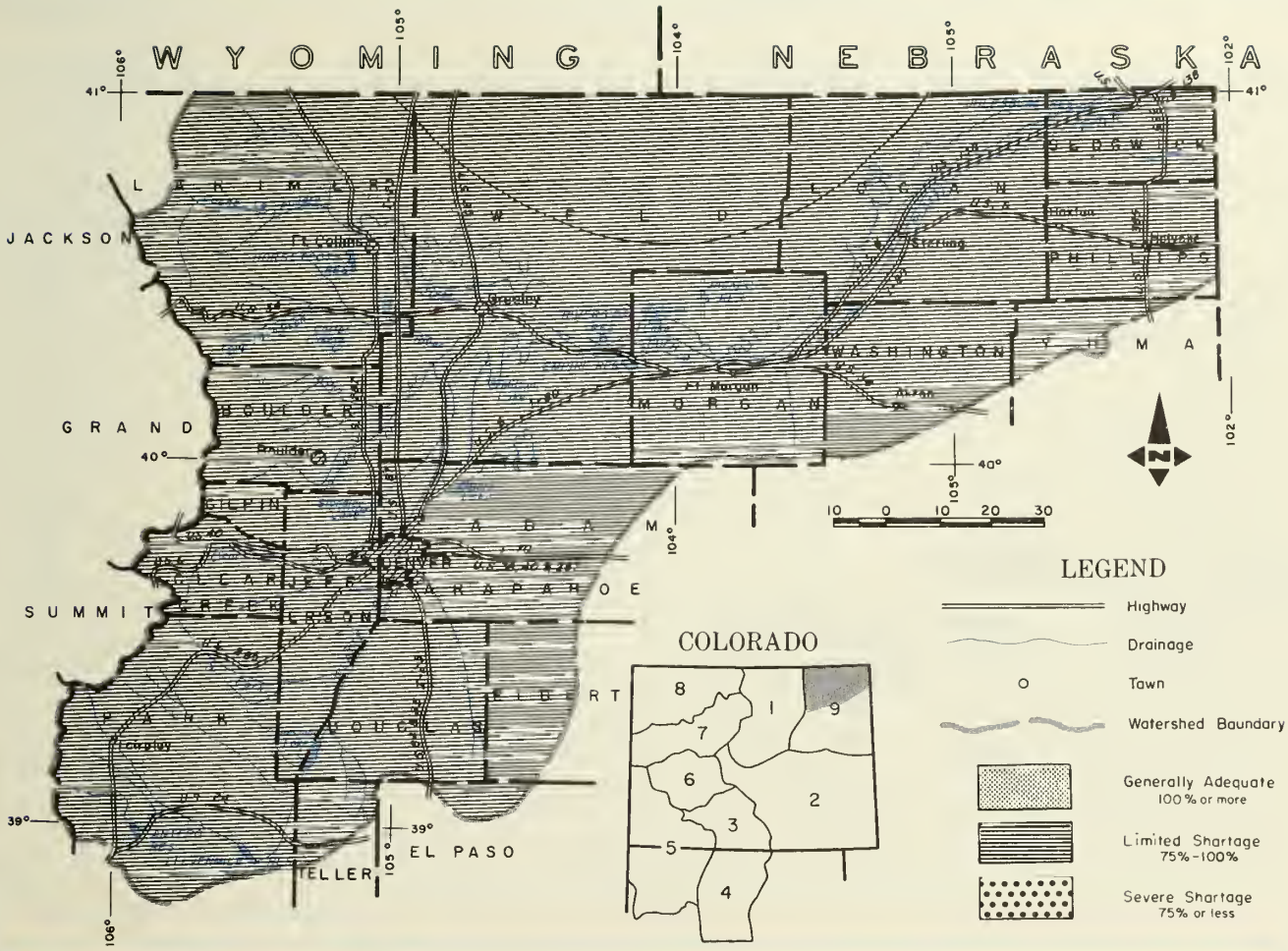
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
MAY 1, 1978

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLY FORECASTS FELL SLIGHTLY THIS MONTH. SNOWFALL WAS BELOW AVERAGE. SOME OF THE FLOW WILL BE NEEDED TO FILL THE SOIL MOISTURE VOID FROM LAST YEAR'S DROUGHT. CONSIDERING CARRYOVER STORAGE AND EXPECTED FLOWS, SOME SHORTAGES CAN BE EXPECTED. EARLY MAY STORMS GREATLY IMPROVED THE MOUNTAIN AND VALLEY SOIL MOISTURE.

This report prepared by

JACK N. WASHICHEK—BERNARD A. SHAFER
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

ROBERT G. HALSTEAD—STATE CONSERVATIONIST
DENVER, COLORADO

RODNEY M. ALT—AREA CONSERVATIONIST
GREELEY, COLORADO

U.S. DEPARTMENT OF AGRICULTURE—SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) April—September

FORECAST POINT	FORE-CAST	% of Average	Average*
Big Thompson River at Drake (1)	105	98	107
Boulder Creek at Orodell	50	102	49
Cache La Poudre River at Canyon Mouth (2)	235	95	247
Clear Creek at Golden (3)	125	98	127
Saint Vrain Creek at Lyons	75	100	75

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through Berthoud Pass Ditch.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Avg.	Fair
South Platte from Fort Morgan to Sterling	Fair	Fair
South Platte below Sterling	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average*
Big Thompson	5	308	95
Boulder	3	249	105
Cache La Poudre	7	229	99
Clear Creek	5	185	107
Saint Vrain	2	293	51
South Platte	3	202	99

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average*
Carter	109	96	106	99
Cheesman	79	30	34	60
Eleven Mile	98	83	90	89
Empire	38	30	35	33
Horsetooth	144	59	99	121
Jackson	35	32	34	33
Julesburg	28	23	24	23
Point of Rocks	70	69	72	66
Prewitt	33	10	27	23
Riverside	58	50	62	58

* 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of MAY 1, 1978

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVG 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	4/26	41	16.2	8.6	18.0
McIntyre	4/27	22	9.1	4.2	10.1
Roach	4/27	56	22.2	12.2	18.5
North Platte River					
Cameron Pass	4/28	75	34.9	22.3	31.2
Columbine Lodge	5/01	60	30.8	4.0	22.0
Northgate	4/28	7	2.2	0.2	3.7
Park View	4/27	12	4.6	1.1	6.5
Willow Cr. Pass (B)	4/27	27	11.6	2.9	11.0
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	4/27	4	1.8	1.8	3.9
Boulder Falls	4/26	34	14.3	5.0	13.1
University Camp	4/26	51	22.7	8.8	19.9
Big Thompson River					
Deer Ridge	4/27	1	0.5	0.0	2.7
Hidden Valley	4/27	22	7.1	0.0	11.6
Lake Irene (B)	4/28	69	29.7	11.5	22.9
Long's Peak	4/28	25	9.7	4.4	12.5
Two Mile	4/27	50	17.3	5.0	17.9
Cache La Poudre					
Bennett Creek	4/30	4	0.8	0.0	---
Big South	4/27	0	0.0	0.0	0.6
Cameron Pass	4/28	75	34.9	22.3	31.2
Chambers Lake	4/27	17	8.4	0.0	6.0
Deadman Hill	4/26	41	16.0	8.6	18.0
Hourglass Lake	4/30	12	4.0	1.2	6.0
Joe Wright	4/28	74	31.7	18.8	---
Lost Lake	4/27	27	11.4	0.7	9.9
Red Feather	4/26	4	1.6	0.5	5.1
Clear Creek					
Baltimore (B)	4/27	4	1.8	1.8	3.9
Berthoud Falls	4/27	24	10.4	5.9	12.4
Empire	4/27	19	6.6	4.2	6.9
Grizzly Peak (B)	4/26	62	26.3	12.6	20.1
Loveland Lift	Discontinued		---	19.4	24.0
Loveland Pass	4/26	39	17.8	9.3	15.0
St. Vrain River					
Copeland Lake	4/28	0	0.0	0.0	2.4
Ward	4/25	10	4.1	1.4	5.6
Wild Basin	4/28	32	13.7	2.7	12.3
South Platte River					
Como	4/26	9	2.7	0.0	---
Geneva Park	4/30	0	0.0	0.0	1.9
Horseshoe Mt.	4/27	31	10.1	5.5	---
Hoosier Pass	4/26	39	14.3	7.1	12.9
Jefferson Creek	4/26	21	8.3	4.1	8.1
Mosquito	4/27	14	5.4	0.5	---
Trout Creek Pass	4/28	0	0.0	0.0	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	4/26	0	0.0	2.6	3.6
Cooper Hill (B)	4/26	49	16.1	8.0	12.1
East Fork	4/27	22	8.7	2.3	7.5
Four Mile Park	4/28	0	0.0	0.0	1.4
Fremont Pass	4/27	59	23.8	12.7	18.1
Garfield	4/28	14	6.6	0.0	8.6
Hermit Lake	4/27	0	0.0	0.0	---
Monarch Pass	4/28	36	16.7	5.0	16.3
Tennessee Pass	4/28	29	11.9	0.0	8.5
Twin Lakes Tunnel	4/27	40	15.7	3.6	9.4
Westcliffe	4/27	0	0.0	0.0	1.6
Cucharas River					
Apishapa	4/27	0	0.0	2.4	3.3
Cucharas Creek	4/27	0	0.0	4.5	---
La Veta Pass (B)	4/27	0	0.0	0.0	2.1
Purgatoire River					
Bourbon	4/27	2	0.5	0.2	2.5
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	4/26	0	0.0	0.0	0.7
Conejos River					
Cumbres Pass	4/25	41	21.0	0.0	13.7
La Manga	4/25	39	16.7	4.7	---
Platoro	4/29	20	8.4	1.0	10.5
River Springs	4/28	0	0.0	0.0	0.3
Culebra River					
Brown Cabin	4/25	0	0.0	0.0	---
Cottonwood (B)	4/25	0	0.0	0.0	---
Culebra	4/26	18	6.6	3.3	3.9
La Veta Pass (B)	4/27	0	0.0	0.0	2.1
Trinchera (B)	4/25	11	4.1	5.9	---
Rio Grande					
Cochetopa Pass	4/26	6	2.7	0.0	3.3
Grayback	4/28	28	9.6	3.0	---
Hiway	4/27	62	25.2	8.9	25.8
Lake Humphrey	4/26	0	0.0	0.0	0.9
Love Lake	4/28	6	1.2	0.0	---
Pass Creek	4/27	0	0.0	0.0	3.5
Pool Table	4/28	3	0.9	0.0	2.4
Porcupine	4/29	13	3.8	0.0	7.4
Santa Maria	4/29	0	0.0	0.0	0.8
Upper Rio Grande	4/29	7	2.7	0.0	2.2
Wolf Creek Pass	4/27	47	22.9	2.9	21.5
Wolf Cr. Summit (B)	4/27	74	30.1	11.2	30.4
RIO GRANDE BASIN-NM					
Chamita	4/25	0	0.0	0.0	0.2
Hopewell	4/27	25	11.0	0.0	---
Quemazon	4/26	0	0.0	0.0	---
Red River #2	4/28	0	0.0	0.0	---
Rio En Medio	4/26	6	2.5	0.0	---

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of MAY 1, 1978

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	4/27	0	0.0	0.0	4.2
Lemon	4/27	0	0.0	0.0	---
Mineral Creek	4/27	38	16.6	0.0	11.6
Molas Lake	4/27	31	12.0	0.0	7.8
Purgatory	NS	--	---	0.0	---
Red Mt. Pass (B)	4/27	90	41.1	13.2	32.5
Silverton Sub-Sta.	4/27	0	0.0	0.0	0.3
Spud Mountain	4/27	61	29.3	0.0	21.7
Dolores River					
Lizard Head	4/28	42	21.2	0.0	14.9
Lone Cone	4/27	27	12.0	0.0	---
Ophir Loop	4/26	44	15.6	3.4	---
Rico	4/28	0	0.0	0.0	0.1
Telluride	4/26	0	0.0	0.0	1.4
Trout Lake	4/26	31	14.0	0.0	9.1
San Juan River					
Chama Divide (B)	4/25	0	0.0	0.0	0.0
Chamita (B)	4/25	0	0.0	0.0	0.2
Upper San Juan	4/27	56	28.3	1.5	25.0
Wolf Cr. Pass (B)	4/27	47	22.9	2.4	21.5
Wolf Cr. Summit	4/27	74	30.1	11.2	30.4
GUNNISON BASIN					
Gunnison River					
Alexander Lake	4/28	78	37.2	2.8	21.9
Blue Mesa	4/27	6	3.0	0.0	1.7
Butte	4/27	49	20.3	3.9	---
Cochetopa Pass (B)	4/26	6	2.7	0.0	3.3
Crested Butte	4/27	29	15.2	0.0	7.0
Keystone	4/27	59	27.4	4.0	17.2
Lake City	4/26	12	4.1	0.0	4.2
Mesa Lakes (B)	4/28	57	25.7	0.6	15.8
McClure Pass	4/25	28	12.3	0.0	9.1
Park Cone	4/27	23	8.7	0.0	7.3
Park Reservoir	4/27	86	40.1	2.6	24.0
Porphyry Creek	4/26	47	21.3	8.2	16.5
Tomichi	4/28	27	12.1	1.6	10.3
Surface Creek					
Alexander Lake	4/28	78	37.2	2.8	21.9
Mesa Lakes	4/28	57	25.7	0.6	15.8
Park Reservoir	4/27	86	40.1	2.6	24.0
Uncompahgre River					
Ironton Park	4/27	25	11.6	0.0	7.0
Red Mountain Pass	4/27	90	41.1	13.2	32.5
Telluride (B)	4/26	0	0.0	0.0	1.4
COLORADO BASIN					
Blue River					
Blue River	4/26	5	1.7	1.8	5.9
Fremont Pass	4/27	59	23.8	12.7	18.1
Officers Gulch	4/26	5	2.3	0.0	4.7
Grizzly Peak	4/26	62	26.3	12.6	20.1
Hoosier Pass (B)	4/26	39	14.3	7.1	12.9
Shrine Pass	4/25	60	25.6	10.5	20.0
Snake River	4/26	9	4.0	0.0	3.3
Summit Ranch	4/26	15	6.4	0.8	4.9

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
Colorado River					
Arrow	4/27	27	12.0	4.6	11.1
Berthoud Pass	4/28	39	17.6	9.9	16.0
Berthoud Summit	4/27	60	24.5	14.7	21.1
Cooper Hill	4/26	49	16.1	8.0	12.1
Fiddler Gulch	Discontinued		---	8.8	14.5
Glenmar Ranch	4/27	4	1.7	0.0	4.4
Gore Pass	4/26	20	9.4	0.0	7.8
Grand Lake	4/28	22	9.3	0.8	4.0
Lake Irene	4/28	69	29.7	11.5	22.9
Lapland	4/26	21	9.4	3.0	7.3
Lulu	4/27	66	31.9	11.8	20.3
Lynx Pass	4/26	30	13.0	0.0	8.4
McKenzie Gulch	4/25	0	0.0	0.0	1.0
Middle Fork	4/27	12	5.3	0.9	6.2
Milner	4/28	41	18.8	4.5	13.1
North Inlet	4/26	24	10.6	0.5	6.3
Pando	4/25	25	10.3	0.0	8.0
Phantom Valley	4/28	23	10.2	0.0	7.0
Ranch Creek	4/27	25	9.9	2.7	9.4
Tennessee Pass (B)	4/28	29	11.9	0.0	8.5
Vail	4/27	68	28.9	---	---
Vasquez	4/27	37	15.2	12.8	12.8
Roaring Fork					
Aspen	NS	--	---	8.5	17.7
Independence Pass	4/27	45	19.3	8.0	16.8
Ivanhoe	4/26	55	24.4	8.3	17.7
Kiln	4/24	40	15.9	0.0	---
Lift	NS	--	---	9.7	19.0
McClure Pass	4/25	28	12.3	0.0	9.1
Nast	4/26	2	0.9	0.0	2.0
North Lost Trail	4/25	24	10.3	0.0	8.3
Williams Fork River					
Glenmar Ranch	4/27	4	1.7	0.0	4.4
Jones Pass	4/28	43	20.7	8.2	15.8
Middle Fork	4/27	12	5.3	0.9	6.2
Willow Creek					
Granby	4/27	13	4.8	0.0	4.0
Willow Cr. Pass	4/27	27	11.6	2.9	11.0
Plateau Creek					
Mesa Lakes	4/28	57	25.7	0.6	15.8
Park Reservoir	4/27	86	40.1	2.6	24.0
Trickle Divide	4/27	90	41.4	7.0	26.9
YAMPA BASIN					
Elk River					
Elk River	4/27	49	22.9	3.5	15.4
Hahn's Peak	4/27	32	15.0	0.0	8.5
White River					
Burro Mountain	4/25	48	21.9	3.5	15.0
Rio Blanco	4/26	34	16.7	0.0	9.8
Yampa River					
Bear River	4/28	27	11.2	0.0	7.5
Columbine (B)	5/01	60	30.8	3.9	22.0
Crosho	4/28	38	17.3	2.4	---
Dry Lake	4/25	59	30.2	5.5	16.9
Lynx Pass (B)	4/26	30	13.0	0.0	8.4
Rabbit Ears	5/01	80	38.8	8.8	27.1
Tower	4/25	175	79.2	29.5	---
Yampa View	5/01	25	12.3	0.0	9.3

NOTE: NS - No Survey
(B) - On Adjacent Drainage

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

- Colorado State Engineer
- New Mexico State Engineer
- Nebraska State Engineer
- Colorado State University Experiment Station
- Rocky Mountain Forest and Range Experiment Station
- New Mexico Dept. of Game and Fish

FEDERAL

- Department of Agriculture
  - Forest Service
  - Soil Conservation Service
- Department of Interior
  - Bureau of Reclamation
  - Geological Survey
  - National Park Service
  - Indian Service
- Department of Commerce
  - NOAA, National Weather Service
- Defense Department
  - Army Engineer Corps
- Atomic Energy Comission

INVESTOR OWNED UTILITIES

- Colorado Public Service Company
- Public Service Company of New Mexico

MUNICIPALITIES

- City of Denver
- City of Boulder
- City of Greeley
- City of Fort Collins

WATER USERS ORGANIZATIONS

- Arkansas Valley Ditch Association
- Colorado River Water Conservation District

IRRIGATION PROJECTS

- Farmers Reservoir and Irrigation Company
- San Luis Valley Irrigation District
- Santa Maria Reservoir Company
- Costilla Land Company
- Uncompahgre Valley Water Users' Association
- Twin Lakes Reservoir and Canal Company
- Trinchera Irrigation Co.

CORPORATIONS

- Aspen Skiing Corp.
- Colorado Fuel and Iron Corp.
- Climax Molybdenum Corp.
- Lake Eldora Corp.
- Vail Associates, Incorporated
- Vermejo Park Corp. (NM)
- Taylor Lumber and Land Company

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- Otto Goemmer, Colorado
- Moreno Ranch, New Mexico

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

SPECIAL MEASUREMENTS
JANUARY 1, MAY 15
and JUNE 1, 1978

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SOME OF THE DATA IN THIS REPORT HAVE BEEN RECEIVED THROUGH THE SOIL CONSERVATION SERVICE'S NEW SNOTEL SYSTEM WHICH TRANSMITS INFORMATION VIA THE SPACE AGED METEOR BURST METHOD FROM DATA SITES TO MASTER STATIONS LIKE THESE.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.

USDA-SCS-PORTLAND, OR 1977

Early Season Snow Report For Colorado

JANUARY 1, 1978

WATER SUPPLY OUTLOOK

USDA Soil Conservation Service
Report Released By
Robert G. Halstead, State Conservationist
P.O. Box 17107
Denver, Colorado 80217

Snow Course	Current Information				Past Record Water Content (Inches)		
	Date of Survey	Snow Depth Inches	Water Content Inches	% of 1958-72 Average	Jan. 1 1958-72 Average	Jan. 1 Last Year	Feb. 1 1958-72 Average
Arrow	12/28	28	6.7	---	---	1.4	---
Berthoud Summit	12/29	43	12.0	154	7.8	4.2	11.4
Boulder Falls	12/28	34	8.3	---	---	---	7.1
Cameron Pass	12/29	40	12.6	118	10.7*	5.2	16.5
Cascade	12/29	14	2.6	---	---	0.0	8.0
Columbine Lodge	12/30	61	17.1	199	8.6	2.9	14.3
Deadman Hill	12/29	31	8.3	---	---	---	10.4
Dry Lake	12/29	45	12.3	145	8.5*	2.3	12.0
Fremont Pass	12/29	41	10.2	170	6.0	2.8	9.8
Hiway	12/29	21	5.1	---	---	---	15.6
Joe Wright	12/29	45	14.1	---	---	5.1	16.1*
McClure Pass #2	12/28	23	4.9	---	---	1.0	11.0*
Mesa Lakes	12/23	19	4.0	54	7.4	0.6	10.5
Mineral Creek	12/29	27	6.6	---	---	0.8	9.9
Park Reservoir	12/27	33	7.4	---	---	0.8	14.6
Pass Creek	12/29	12	2.6	---	---	---	8.2
Porphyry Creek	12/30	33	8.3	117	7.1	1.6	10.0
Rabbit Ears	12/30	55	14.7	124	11.9*	2.7	16.1
Red Mountain	12/29	50	13.2	97	13.6	2.8	19.0
Spud Mountain	12/29	27	6.1	58	10.5	0.0	15.2
Tennessee Pass	12/29	27	6.3	147	4.3	1.8	6.5
Tower	12/29	113	33.3	159	20.9*	5.3	34.0*
Two Mile	1/01	42	10.2	162	6.3	1.0	8.6
University Camp	12/28	48	12.8	188	6.8	2.5	10.9
Upper San Juan	12/29	31	7.0	49	14.2	1.9	19.1
Willow Creek Pass	12/29	26	6.4	---	---	1.5	7.7
Wolf Creek Pass	12/29	28	6.5	48	13.5	2.1	17.4
Wolf Creek Summit	12/29	25	5.8	40	14.5	2.3	18.5

*Less than 10 years of record.

(OVER)

EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1978

WATER SUPPLY OUTLOOK

Colorado snowpack varies greatly as indicated by the first snow surveys of the year.

Central Colorado from Fremont Pass to the Wyoming border has an excellent snowpack while the southern part of the state is much below normal. However, even the light snowfall in southern Colorado is much better than last year at this time.

Only a limited number of snow courses are read January 1, so it is difficult to estimate the entire snowpack. If the snowpack in the northern half of the state continues to build at the current rate it would help alleviate the effects of last year's drought.

The southern portion of the state still needs additional snow.

Early Season Snow Report For New Mexico

JANUARY 1, 1978

WATER SUPPLY OUTLOOK

USDA Soil Conservation Service
Report Released By
A. W. Hamelstrom, State Conservationist
P.O. Box 2007
Albuquerque, New Mexico 87103

Snow Course	Current Information				Past Record Water Content (Inches)		
	Date of Survey	Snow Depth Inches	Water Content Inches	% of 1958-72 Average	Jan. 1 1958-72 Average	Jan. 1 Last Year	Feb. 1 1958-72 Average
Bateman				---	---	1.1	6.4*
Chamita				---	---	0.5	5.5
Hopewell	12/28	18	4.3	---	---	0.6	---
North Costilla	12/30	12	3.2	---	---	---	---
Panchuela #1	12/30	3	0.8	---	---	---	2.5
Quemazon	12/29	10	2.3	---	---	1.1	6.1
Red River #2	12/29	12	2.6	---	---	2.1	3.7

*Less than 10 years of record.

Early snow course measurements have not been made in the past in New Mexico. Several snow courses are now automated and early season readings will become available.

The few snow courses read would indicate the snowpack is considerably better than last year at this time. Hopewell Lake snow course indicates 4.3 inches of water compared to only 0.6 inches last year.

If the snow for the remainder of the year increases at this rate, New Mexico should have at least an average water supply this year.

MAY 15, 1978

WATER SUPPLY OUTLOOK

USDA Soil Conservation Service
Report Released By
Robert G. Halstead, State Conservationist
P.O. Box 17107
Denver, Colorado 80217

Snow Courses	Current Information				Past Record Water Content (Inches)		
	Date of Survey	Snow Depth Inches	Water Content Inches	% of 1958-72 Average	May 15 1958-72 Average	May 15 Last Year	May 1 This Year
Berthoud Summit	5/12	76	29.2	143	20.4	9.4	24.5
Cameron Pass	5/15	80	39.9	137	29.2	12.6	34.9
Cascade	5/15	0	0.0	---	---	0.0	0.0
Columbine Lodge	5/15	52	28.6	217	13.2	0.0	30.8
Culebra #1	5/12	32	11.9	---	---	0.0	6.6
Deadman	5/12	63	24.4	---	---	---	16.2
Fremont Pass	5/12	71	26.3	162	16.2	7.7	23.8
Joe Wright	5/15	73	33.6	120	28.0*	12.3	31.7
McClure Pass	5/12	17	8.2	---	---	0.0	12.3
Mesa Lakes	5/12	58	28.0	311	9.0	0.0	25.7
Milner	5/13	45	20.8	224	9.3*	1.9	18.8
Mineral Creek	5/15	32	15.0	---	---	0.0	16.6
Park Reservoir	No Survey		---	---	---	0.0	40.1
Park View	5/15	6	2.7	135	2.0	0.0	4.6
Porphyry Creek	5/15	44	22.3	172	13.0	0.0	21.3
Rabbit Ears	5/15	76	38.9	139	27.9*	1.2	38.8
Red Mountain	5/15	88	44.5	160	27.8	2.0	41.1
Spud Mountain	5/15	62	28.2	158	17.9	0.0	29.2
Tennessee Pass	5/12	32	12.8	441	2.9*	0.0	11.9
Two Mile	5/15	69	22.7	128	17.8	4.2	17.3
University Camp	5/11	66	26.8	160	16.7	2.4	22.7
Upper San Juan	5/12	67	30.6	200	15.3	0.0	28.3
Willow Creek Pass	5/15	21	9.4	159	5.9	0.0	11.6
Wolf Creek Pass	5/12	52	24.9	187	13.3	0.0	22.9
Wolf Creek Summit	5/12	87	33.6	116	29.0	6.4	30.1

*Less than 10 years of record.

(OVER)

MAY 15, 1978

WATER SUPPLY OUTLOOK

Storms during the first week of May improved the snowpack above 10,000 feet elevation over most of the state. Increases of from one to five inches of water content were noted over the May 1 readings.

Most of the snow below 9,500 feet elevation has melted with much of the snowmelt going directly into the soil with relatively little runoff. As higher elevation snow begins melting streamflows will rise rapidly.

Many of the high elevation snow courses now range from 120 to 300 percent of normal for this time of year. This situation should help insure good late season water supplies. Overall seasonal water supplies will only be improved by about five percent over forecasts issued near May 1.

Some high water can be expected in the northwestern and southwestern corners of the state where snowpacks are highest. A prolonged warm period will cause much of the area above 10,000 feet to begin contributing snowmelt runoff.

JUNE 1, 1978

WATER SUPPLY OUTLOOK

USDA Soil Conservation Service
Report Released By
Robert G. Halstead, State Conservationist
P.O. Box 17107
Denver, Colorado 80217

Snow Courses	Current Information				Past Record Water Content (Inches)		
	Date of Survey	Snow Depth Inches	Water Content Inches	% of 1958-72 Average	June 1 1958-72 Average	June 1 Last Year	May 15 This Year
Berthoud Summit	5/30	51	23.2	192	12.1	6.2	29.2
Cameron Pass	5/31	67	30.9	141	21.9	10.7	39.9
Cascade	5/30	0	0.0	---	---	0.0	0.0
Columbine Lodge	5/31	22	11.2	747	1.5	0.0	28.6
Deadman	No Survey	--	---	---	---	2.1	20.9
Fremont Pass	5/31	47	20.6	240	8.6	3.6	26.3
Joe Wright	5/31	63	24.8	120	20.6*	9.8	33.6
Mesa Lakes	5/26	33	15.5	1107	1.4	0.0	28.0
Milner Pass	5/29	28	14.4	655	2.2	0.0	20.8
Mineral Creek	5/31	0	0.0	---	---	---	14.9
Park Reservoir	5/31	50	26.0	---	---	0.0	37.1
Park View	5/30	0	0.0	---	0.1	0.0	2.7
Porphyry Creek	5/31	29	15.0	313	4.8	0.0	22.3
Rabbit Ears	5/31	57	29.1	229	12.7*	0.0	38.9
Red Mountain	5/31	63	31.8	248	12.8	0.0	44.5
Spud Mountain	5/31	36	18.1	191	9.5	0.0	28.2
Tennessee Pass	5/31	0	0.0	---	0.0	0.0	12.8
Two Mile	5/31	58	22.8	161	14.2	2.2	22.7
University Camp	5/29	38	18.6	204	9.1	0.3	26.8
Upper San Juan	5/30	26	15.0	333	4.5	0.0	30.6
Willow Creek Pass	5/30	4	1.5	167	0.9	0.0	9.4
Wolf Creek Pass	5/30	18	10.0	286	3.5	0.0	24.9
Wolf Creek Summit	5/30	67	32.8	159	20.6	7.8	33.6

*Less than 10 years of record.

Summer streamflow has been retarded by cool spring temperatures. Many of the high mountain areas are still receiving snow.

June 1st snow surveys are made on only a limited number of high elevation courses and these are all much above normal.

A considerable amount of runoff is still expected, however, peak flows may be much later than usual. Several days of warm temperatures should increase flows materially.

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
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